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Agriculture in Holland

By H. O. Buckman

TO AN AMERICAN accustomed to our somewhat careless agricultural management, the countryside of Holland is a constant source of interest. The picturesque houses with their well swept doorsteps and their gardens bright with flowers, the ever present canals with their barges and bridges, the paved roads, the fields, and the people themselves have an air of orderliness and well-being that is novel indeed. Whether in the low-lying pastures of Friesland, the reclaimed swamp lands of Groningen, the garden and bulb sections of the Haarlem basin, the sandy stretches of Gelderland, or the alluvial reaches of Brabant, the impression is the same, a careful, intelligent, and intense utilization of the land.

Although many kinds of soil are found in Holland, three classes predominate, sands, clays, and peat. The sands are of two kinds, those of the dunes that fringe the western coast and those of the glacial outwash that occupy great areas in Gelderland, Drente, and Brabant. These dunes, often entirely cut off from the mainland, furnished, centuries, ago a refuge and finally a home for the fisher folk from whom have sprung the Dutch people. Gradually, gardens, and then little fields developed on the lee side of the sandy wastes, the beginnings of an agriculture famous the world over.

At the close of the glacial age great volumes of water, evidently from the retreating ice sheet, drenched the land with sandy outwash. For ages this remained a barren or heather waste, but in late years much of it has been reclaimed. The transformation of this desolate moor into fertile fields seems almost a feat of magic, so vivid is the contrast. The colonization of this land, sponsored by the government, is but one of the remarkable agricultural projects of the Dutch people. Such reclamation has been possible, it is almost needless to say, only by the use of liberal quantities of mineral fertilizers. The country is living in a fertilizer age.

Clayey soils occur in the areas reclaimed from the sea by dyking and pumping. Since the sixteenth century over 900,000 acres have been added in this way to the arable lands of Holland. The Haarlem basin near Amsterdam is one of the oldest

and largest projects of this kind. It occupies approximately 50,000 acres and supports a population of 20,000 people. While many types of agriculture are found in this district, the bulb industry always attracts especial attention. The innumerable beds of tulips, narcissus, and hyacinths make one wonder how the owners can maintain the neatness which apparently is a criterion in this little country.

IT IS only fair to say that the soil of the polders, as the reclaimed areas are called, is extremely variable. Near the old shores the land is often sandy. Farther out the soil becomes gradually heavier until the sticky sea-clay is finally encountered. Thus it is possible to find a soil adapted to almost any crop that prospers in this mild and humid climate. Much of this land, reclaimed from the sea by long and bitter labor and kept free of water by constant pumping, is given over to dairying, although other types of agriculture are by no means unimportant.

The draining of the Zuider Zee, which is at present attracting world-wide attention, will expose land such as has just been described. The progressive agricultural specialists of Holland have already classified these soils even though they are yet under many feet of water. Moreover, the probable agricultural value of the land after it has been properly drained and leached of its excess of sea salts has been reckoned. Even the types of agriculture suited to the various sections have received attention. We survey soils in America, but not under such unusual conditions, nor with such surety of future agricultural utilization.

The Zuider Zee is about the size of Rhode Island and occupies one-twelfth of the area of Holland. When dyked and drained it will add over 550,000 acres of arable land to the country. The drainage lake remaining is to be called Lake Yssel. Only when one sails the Zuider Zee, 30 miles wide and 40 miles long with an average depth of possibly 12 feet or more, is the immensity and daring of the project fully apparent. The initial reclamation, however, is not the only problem. Maintaining this great area free of seepage and

rain water will be a constant care and expense, as it lies many feet below the level of the sea.

Already work has begun on the northwest polder, the smallest of the four districts. This area will probably produce its first crop in 1934. The whole project should be completed by 1960. The new lands as they become available are to be colonized under government supervision and should furnish homes for over 2,000,000 persons. No previous reclamation project even remotely approaches the one now under way, which bespeaks the confident daring of the Dutch authorities.

Areas of heavy soil also occur along the major streams, especially in the valleys of the Rhine and the Meuse in southern Holland. These alluvial soils support a varied agriculture, usually as intense and as important as that of the more spectacular polders. The average American feels more at home on these soils than on the clayey sealands or the sandy stretches which depend almost wholly for their productiveness on the yearly applications of commercial fertilizers.

ONE OF the most interesting features of Holland, agriculturally speaking, is the peat land of the Provinces of Groningen and Drente in the extreme northeast. This particular organic deposit, and there are many such in the Netherlands, extends from Groningen, the seat of the State Agricultural Experiment Station, southeastward to the German border, a distance of perhaps forty miles. Approximately 100,000 acres are involved in this particular tract. From time immemorial this area has been a vast and almost impassable swamp in which untold generations of plants have been buried. Gradually these organic deposits, the "hoch-moor" of the Germans, have been changed by slow decay into peat. This black fibrous product is not only useful as a fuel when dry, but is also capable, when drained and properly handled, of producing a valuable soil as well. And in this water-locked and water-logged country fuel and soil are always at a premium.

THE reclamation of this area was begun 300 years ago for the purpose of utilizing the peat as fuel. A main canal



A PICTURESQUE SCENE FROM HOLLAND
Row of Typical Dutch Buildings with Flower Beds Between Them and the Bank of the Canal

was driven into the swamp with laterals at intervals of 150 or 300 feet. These served for drainage as well as a means of barging the peat to the starch factories, paper mills, brick kilns and other industrial plants in Holland and neighboring countries. Since the depth of the peat often reached 15 or 20 feet, the immensity of the deposit is obvious.

The wisdom of the Dutch government is evident in the close regulation that it has exercised over the removal of this fuel. The upper two feet of the peat must be put away and saved. When the barren sand underneath the deposit is finally exposed, this organic material is spread over its surface. It is then covered with 4 or 5 inches of sand from the canals. The subsequent tillage which the land receives mixes the two layers and produces a soil, artificial to be sure, but wonderfully adapted to the agriculture now on it.

Over 80,000 acres have been thus reclaimed, served by a main canal 50 miles long and by innumerable laterals. The swamp had gradually disappeared and its place taken by a country-side literally groaning with a wealth of potatoes, oats and rye. And as often happens in America, most of these crops are sold from the land. The potatoes are used directly as food or are made into starch, while the cereals are consumed in various ways. Even the straw is utilized for paper. Crop residues as a means of soil fertility maintenance are an unknown quantity in this area.

Under such circumstances commercial fertilizers are an absolute necessity and are required in large amounts. Perhaps no area in the world uses artificials so intensively. But the crop yields refute all criticisms. Six hundred bushels of potatoes to the acre, 60 or 70 bushels of

oats, and other crops in like proportions are not at all uncommon. In fact this reclaimed area is a veritable garden. There is no uncropped land except that necessary for roads, canals, and farmsteads. There are no fences, practically no livestock, no woodlots, and what is more noteworthy, few weeds. This to an American is almost beyond belief.

NEAR Groningen where the reclamation began three hundred years ago the houses are old and picturesque. To the southeastward the country presents a progressively younger appearance. The houses are newer and modern methods of building and layout are evident. The colonization is under government regulation and as a result the houses are built according to definite specifications. The latest ones are of brick. The farms range from 25 to 50 acres in size and front the canal and its parallel highway at regular intervals. These homesteads present an air of orderliness and keeping that makes one ashamed of the shabbiness of most of our farming communities.

Impressive and intensive as is the agriculture of Holland, whether on the sandy outwash, the clayey polders or on the novel remade lands of the "hoch-moor," the country people themselves are of greater interest. For centuries they have fought the sea, resisting at the same time the savage encroachments of other peoples. Behind their sand dunes, so poor as to be almost worthless for crop production, they have literally dug their soil from the sea and have developed thereon an agriculture which is not only highly prosperous, but one of the most productive in the world.

Thirteen Weeks In The Cascades

By Charles Diebold '30

TWO young men, who had but recently forsaken little gray frosh caps, studied intently the mineralogy exhibit of the Field Museum at Chicago one Sunday afternoon in June. Were we not going out West to get our forestry experience? Others had found gold and we ought to know what to look for. "Hughie" Jennings '30 and I left Chicago that evening on the luxurious Oriental Limited. Forty-eight hours later we piled off the train at Glacier National Park. We found much to our dismay that the park was still officially closed; a 31 inch snowfall in the last week of May still laid in drifts and swollen streams made the roads and rails almost impassable. I was determined nevertheless to see the park. "Hughie" in the meantime had become interested in the personnel of the post-office, consequently I set out alone. If it

had not been for the great hospitality of the Ranger at Two Medicine, the first tourist of the 1927 season might not have written this article.

A few days later I saw the Columbia river valley unfold before my eyes in a glare of sunshine. A giant blue stream over a mile in width foamed and eddied on its way to the ocean more than 300 miles away. Sand, sagebrush, and rocky buttes stretched across the horizon as far as one could see, except tiny green spots along the river apple orchards. The great apple industry of the Northwest, which is dependent on irrigation, has sprung up along the mammoth Columbia river system. I finally arrived at my destination, Twisp, which is 35 miles from the railroad. I found the ranger station at dusk and was informed that I might sleep up-stairs. A scurrying brown bug at-

tracted my attention and imagination while I was preparing to go to bed. I immediately decided to take my blankets down stairs and sleep on the floor rather than entertain company of a questionable nature. When I showed a sample of the insect to the Ranger the next morning, he laughed for it was a pine beetle.

The following two weeks were spent working on road maintenance, telephone line construction, attending a lookout school, and a three day fire camp. The three day fire camp is an annual institution which almost every employee on the Chelan National Forest looks eagerly forward to and attends. The purpose of the camp is to increase the efficiency of the men in locating and fighting fires and to demonstrate new methods of fire fighting. It indirectly serves as an annual reunion, in fact it is the only opportunity that

many men have a chance to see each other from one year to the next. Some of the men traveled 50 miles by boat and 70 miles more by car to attend this camp.

I HAD, meanwhile, agreed to work as a lookout for the rest of the summer on Granite Mountain; a long ridge of granite towering well over 7000 feet in elevation and dropping abruptly several thousand feet on the north end of the mountain. I had the novel experience of leading a string of pack horses out of town alone, June 27. The ranger and packer met me at the last point where automobiles go; my earthly possessions and summer supplies were soon lashed on the groaning cayuses. We camped that night at the foot of the mountain which was to be the scene of much experience, good and bad. I learned that evening that a cayuse can run towards home with hobbles on as fast as one can spur the "ornery" critter away from home.

The following day we made a reconnaissance of the mountain and located my future residence, for I was destined to be the first lookout stationed on Granite Mountain. The mountain was heavily wooded clear to the top, therefore, it was necessary to build a platform supported by the tops of three trees so that I could obtain a good view of all the surrounding country. The hardest work, however, was stringing and carrying two miles of telephone wire up the old peak. We had expected to find grass for the horses but there was none on the mountain. We were forced to use cayuses as little as possible for they were weak from a diet of pine cones and other choice tidbits. It was necessary to string a quarter of a mile of wire down to a spring in order to obtain a ground for an ancient army telephone which was my connection with the outside world. The spring receded down the mountain as the summer went on with the result that my ground was so poor that I was unable at times to call a lookout 35 miles away on "official business." Our "official business" consisted of every topic that two lonely young men can talk of, and we soon became proficient at the art of talking 30 minutes at a time.

It was my duty as a lookout to locate and report forest fires. I learned as soon as possible the surrounding country within a radius of 25 miles so that I could locate a fire within a forty acre plot by means of an Osborne Junior fire finder. This instrument consists of a map of the region mounted within a circular steel rim graduated into degrees and oriented true north. The United States Land Survey greatly facilitates location of fires by dividing the country into ranges, townships, and sections. My hardest task was to decide whether the strange grayish object that I saw in the distance was smoke or one of the multitude of things that may be mistaken for smoke by a novice. Air cur-

rents frequently cause the small grayish clouds that settle in valleys after a storm to change size and shape. It is often impossible to distinguish these clouds from smoke however, smiliar clouds in nearby valleys usually let the "cat out of the bag." At a distance of 25 miles an unweathered rock slide in hazy weather can be distinguished from smoke only by the fact that it does not change in size. After watching for five minutes through a pair of field glasses, I have seen tongues of flames leap from grayish colored objects which were really rock slides! A lookout must also know where the sheep drives are located because bands of sheep send up clouds of dust which can not be told from smoke except that it keeps moving slowly and does not increase in volume. I reported over 30 forest fires that summer. They were all caused by lightning.

A GOOD portion of my time was spent in cooking and eating. A fire between two small logs served as my cook-stove. When one is many miles from a store you learn to be economical. Stale bread, when it is covered with green mold, can be made palatable by merely cutting the mold off and making French toast out of it! The groceries had to be packed in 16 miles by pack horse. One evening while I was waiting for the packer to arrive I suddenly heard some one yelling in a language not to be found in the dictionary. I rushed down the mountain and soon reached the scene of disaster. Eggs, bread, beans, and macaroni were liberally smeared over the landscape—the result of a pack horse falling over backwards while going up a steep place. My friends, the chipmunks, appreciated my presence by sampling all supplies from tea to oatmeal. I hung my boots from the top of my tent after a hole had been chewed through one of them by a hungry chipmunk. I well remember my first attempt to make "dodger." The procedure looked simple when I had watched the ranger so I tried it. I rolled the cover of the flour sack down, hollowed out a space and put sugar, salt, baking powder in, then I dumped a cup of water in. Instead of a nice floured ball of dough resulting when I stirred the mixture up, the exterior of the flour sack showed signs of moisture and the contents inside was somewhat like soup. I plunged both hands in the flour in a vain attempt to stop the downward course of the water. I withdrew from the scene with well floured hands amid the roaring laughter of those present.

One of my duties as a lookout was to keep a record of lightning storms for the United States Weather Bureau. I counted over 300 flashes of lightning in an hour during the worst storm of the season. Lightning danced up and down continuously on certain mountains, the sky seemed to be rent by the terrific flashes. A few days later I saw lightning hit a tree

but two miles away. A cloud of smoke arose a few minutes later from the spot. The fire guard who was stationed with me left immediately. At Conconully, 16 miles away, a band of men was recruited as fast as possible and sent on to help because the fire was in a place of high fire hazard. A short time later a sharp shower came up and the smoke faded away. The guard returned late that night and had been unable to find the fire. A close watch was kept for several days and part of the crew from town kept on in case the fire should break out. The men finally left and a week later the guard decided that he too, preferred his wife's affections and cooking. Three hours after his departure I saw a cloud of smoke rising up from the spot. I reported the fire and was ordered to fight it until help could be sent. I found the fire burning in a giant old Douglas fir log; the flames were already licking the branches of a young fir. I soon had the fire under control by throwing dirt on the blazing log and by digging a trench through to the mineral soil around the fire. The fire must have smouldered in the log for an entire week. The shadows began to lengthen, but no one came to relieve me. I kept a fire going all through the cold night for I had no blankets, and all too frequently I heard an animal moving in the brush. Jones, the fire guard, had found cougar tracks but two miles away four days before. A boy had been killed and eaten by a cougar the winter before only a few miles to the south. It seemed centuries before the first rays of light streaked up from the east. There near at hand stood the creator of the noises of the night, a deer. A few hours later help arrived and I returned once more to Granite Mountain.

THE weather at times was not exactly pleasant for I had only summer clothing; snow, hail, or sleet fell 22 days out of 70. The afternoon of Labor Day it started to snow. It was still snowing 48 hours later, a foot of snow covered the ground, and my matches were too damp to light. No fire—no eat, for my cooking was open air style. I set out for town 16 miles away—in a heavy snowstorm. I had always wanted to go off the northeast corner of the mountain for to my knowledge no one had ever made the descent that way. I knew that several hundred dollars worth of gold had been taken out of the Middle Fork of Beaver. No one had ever found the source and besides that way cut off six miles. The mountain dropped off in a series of short cliffs and in a short time I did not know whether I was going towards town or not. I soon realized that I must turn back and luckily made a circle and followed my old tracks back to camp. I then followed the telephone line to Conconully.

Conconully was at one time the county seat of Okanogan County, a county nearly three times the size of the state of Delaware. Conconully was a boom mining town before the bottom fell out of the silver market. It had now lost its electric lights, many houses had been moved away, and the big court house stood vacant. I stayed at the ranger station and at meal-time was asked to get a pail of drinking water. Imagine my surprise when I learned that the village pump was Sal-

mon Creek which ran through the middle of the town.

The heavy snowstorm ended the fire season and three days later I went back and took my last look. To the west across the valley of the Methow lay the jagged Sawtooth range; to the northeast mountains in British Columbia loomed up 100 miles away; to the southeast the Big Bend country stretched endlessly beyond the Columbia river; to the south mountains appeared on the horizon beyond Wenatchee 120 miles air line. The sun was

setting as a ball of fire behind the snow capped peaks; all the colors of the rainbow streaked across the sky, purple shadows stole down across the forest clad slopes into the valleys far below where here and there a light twinkled beside a dark object, a rosy cheeked apple orchard. It seemed as though I was losing my best friend when I left the old mountain. True it was hard and grim, but it played fair. I visited the Canadian Rockies on my trip back to Cornell, whose splendors I shall never forget.

Current Trends in the Vegetable Business

By Paul Work '10

THE TERM "business" in the title is used advisedly. Vegetable production began as a pin-money enterprise when the country home gardener a century or two ago began to sell his surplus to his town neighbors who wanted to buy. Today the vegetable is "big business" representing about one and a third billion dollars, farm value, and much more than this as the housewife makes her purchases. The same phrase is seen to apply when we observe that Imperial Valley crop production is in the hands of so small a group of large owners, that they are able voluntarily to limit and allot shipments for a given day or week even though this means the total loss of part of the crop—the part that would only break the market and cause heavier loss in lower prices. The small grower, too, is becoming a business man as he considers costs, returns and changes of planting plans from one crop to another.

The vegetable business has grown to the point where it represents about ten per cent of the entire crop production of the country. In some states it reaches forty per cent.

The total gross value of all crops in New York averaged for 1924-28 the sum of \$295,000,000 annually. Definite recent figures on the vegetables are not available. We are awaiting the census returns. Careful estimates indicate a value between 90 and 100 million for vegetables including potatoes and rural home gardens, or about a third of the total crop value for the state. The census of 1919 reported that 75,000 of the 193,000 farmers grew potatoes for sale, and about 35,000 grew other vegetable crops for market. The general farmer has gone heavily into vegetables during recent years and it is probable that a fourth to a third of our farmers now grow vegetables other than potatoes to sell.

Carlot movement of vegetables has grown marvelously during the past decade, rising from 383,000 cars in 1920 to 587,000 cars in 1928. Acreage for ship-

ment of seventeen leading crops has grown from one and one third million acres to two and one third million acres. The area devoted to potatoes, cabbage, onions, and sweet potatoes has changed relatively little. The areas devoted to beans, slicing cucumbers, lettuce, spinach, and green peas have been multiplied by from five to ten.



A HOME VEGETABLE GARDEN
A Few Years Ago All Our Vegetables Came From the Home Garden. Now Their Place is Being Taken by Large Specialized Farms.

THERE has been little change in the total value of vegetable crops produced. The public has gotten the vegetables, but the grower has not received the money. The trend of fruit and vegetable prices was steadily downward for four years until 1929. The current crop year has shown a much higher level, due largely to high prices for certain heavy crops. A year ago the index stood at 112, lower than for any other farm group. For February 1930, it stood at 168 as compared with 115 for grain, 131 for all farm

products and 135 for the things the farmer buys.

Average yields of many crops have actually declined, some by over 50 per cent. Only two important crops have gained. This probably reflects the tendency of farmers in general to take up vegetable crops under unsuitable conditions. This may be due to pressure of low returns from other crops, to promotion efforts of commercial and transportation interests, to the urge to diversify, to an impression that truck crops are highly profitable, and through hope that a "big killing" may be made at this time. All of these factors tend to enlist producers who cannot do the thing well, who cut the average of quality, and who contribute to over-production and so undermine the general price level reducing the profit of all.

Trends in the vegetable business are not in full accord with one another and wide fluctuations make it difficult to read the pointers. Every arrow, however, points toward increasing competition. Not much can be done to insure high, or even higher prices. The key word in the business is adjustment; adjustment to new sources of products, new methods and equipment, and new market methods and outlets.

Some growers of every crop are making some money, but much adjustment is needed in order to attain the ideal of an abundant supply of vegetable food at moderate prices with fair profits. The world should know that competition in the vegetable field is extremely severe and that these crops should be undertaken only where soil, climate, transportation, selling facilities and the personal factors are highly favorable. There should be no effort to discourage persons who can meet these conditions, for the business is a good one under proper circumstances. On the other hand, vegetable production should be undertaken with great caution, using careful cost account methods to find whether a profit is actually recorded or not. The money-loser hurts himself and the whole industry. It is far better

to stay out, or to quit knowingly, than to face the tragedies of bankruptcy.

WHILE carlot shipments from distant fields have invaded the markets of populous states, the changes in the industry within those states have been no less revolutionary. Costly labor and new machinery have changed the methods of production. Good roads have made available land more distant from our cities. Markets are no longer local. F. P. Weaver has recently studied four leading upstate markets and he finds that vegetables constitute from 55 to 81 per cent of total sales. Nearly 40 per cent of the produce sold on Elk Street market in Buffalo came more than twenty miles. Of \$15,000,000 worth of produce handled on these four markets, inter-city truckers took \$3,500,000 worth. On Albany market they took nearly half. Growers are coming to realize that carlot competition and necessities of inter-city movement demand a new study of grades and pack-

ages. Fine lettuce offered in old broken-down orange crates with newspaper liners is seriously discounted in face of the far-traveled product in a new crate, with catchy label and clean new liner. We face the problem of learning how to grow and grade and pack under our conditions.

The markets themselves are now regional and we may expect great progress in their equipment and management under the state control now being discussed.

LARGE-SCALE artificial proposals for farm relief can hardly be expected to work far-reaching changes in the vegetable business in the near future. Growers themselves must develop relief measures of their own for the betterment of the situation. Eight possible lines of progress are suggested.

1. Spread the gospel of cost accounting so that growers will either eliminate a given crop or make it pay.

2. Make economical use all along the line of better equipment, better seed,

better plants, and other improved means and methods of production.

3. Maintain fertility cheaply, especially by the use of commercial fertilizers which are relatively low in price and by plowing under green-manure materials.

4. Battle eternally, and intelligently, against the increasing horde of insects and diseases which cut yields and ruin quality.

5. Sell a quality product, so grown, harvested, graded, packed, and shipped as to command maximum returns.

6. Improve the marketing system, especially in the cooperative field, for low cost and effective selling, and also for taking advantage of the resources of the Federal Farm Board.

7. Adopt a strictly business attitude in the use of land, labor, and credit in marketing and in counting profit and loss.

8. Make full use of sound service agencies, public and commercial, to achieve these ends.

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Genesee County Potato Improvement Program

By Gerald F. Britt '27

POTATOES, one of the most important cash crops in Genesee County, with an annual value of approximately one million dollars, have for years received their proportionate share of the County Farm Bureau's attention. But this year, the potato committee of the bureau has laid out a very tangible potato-improvement program, involving specific project activities and what in my opinion is more important—specific recommendations of cultural practices which all growers should follow.

Genesee County is well situated as a potato-producing area due to its soil and climatic adaptations and also due to the fact that it lies within forty miles of a million people, being about half way between Rochester and Buffalo and adjacent to many smaller cities.

That there is crying need for improvement cannot be questioned, since we know that cost of production per bushel during recent years from our cost accounting service was \$1.10 in 1927, and \$.92 in 1928. Some of the growers who made up these averages had costs per bushel as low as \$.51 while others ranged as high as \$2.52 per bushel. Certainly, since we cannot control the price we receive for our potatoes, our only other alternative is to keep our per bushel cost as low as possible.

From a further study of these figures the importance of yield per acre in determining cost of production per bushel stands out. A recent analysis made from state-wide cost accounts by the farm management department at Cornell University also indicated the importance of yield per acre

in lower costs per bushel, and further demonstrated that yield depended equally on several factors: thoroughness of spraying or dusting, quality of seed, seed treatment, quantity of seed, amount and quality of fertilizer. The department's data also indicated that a farmer has a good chance of losing money by taking care of one or more of these factors without going the limit and doing the whole job right. For example, if a farmer treats inferior seed, the seed is still inferior and the money is largely wasted. If a farmer spends \$25 per acre for this seed he is also wasting money unless he meets the other requirements.

The committee recommends certified seed or seed not more than one year removed from certification, treat this seed—use at least 18 bushels per acre; use enough of a good grade of high analysis fertilizer containing at least 20 units of plant food per ton; plant three inches deep and practice as near level cultivation as possible from the standpoint of weed control. The committee says that we should spray or dust at least six times during the season and when the crop is grown, we should grade it according to U. S. Standards for market.

LET US take up the committee's recommendations, point by point, and analyze them. Their first recommendation which has not been previously mentioned, is to raise only white rural varieties. The purpose of this is to avoid turning out a sample of potatoes which is not uniform as to shape or color.

As to quality of seed—our potato committee recommends that in order to control virus diseases, we should use seed not more than one year removed from certification. Preferably certified seed should be used or this seed may be grown from a seed plot which has been carefully rogued and for which certified seed was used. The importance of good seed can be well illustrated when we realize that a leaf roll hill yields on the average only about a third as much as a healthy hill. Thus, if seed contains 30% leaf roll infected tubers, one fifth or 20% of our yield is lost before we start. A survey in 1928 by the Genesee County Farm Bureau showed an average of 18% leaf roll for the county as a whole. This means 12% reduction in yield from the use of poor seed alone. Your farm bureau manager can give you an up-to-date list of near-by growers having certified seed for sale. There are, of course, other virus diseases which can be controlled only by the use of certified seed, namely, wilt, black leg, mosaic, yellow-dwarf, and giant hill.

Many experiments in seed treating throughout the country have yielded an increase of from 20 to 25 bushels per acre. Unquestionably seed treating is a profitable practice, both from the standpoint of increasing yields through the control of rhizoctonia and safeguarding the quality of the crop by preventing the introduction into the soil with seed of the organisms causing scab. So far the hot corrosive sublimate of seed treating has been most satisfactory and has been recommended by the plant pathology department at

Cornell University. Last year our farm bureau treated over 33,000 bushels of seed or enough for nearly one fourth the entire acreage of the county. If a better method is developed which has been tried long enough experimentally, so that it is

safe, our farm bureau will recommend and encourage it.

The committee tells us that we should use at least 18 bushels of seed per acre which, with average size of seed piece $1\frac{1}{4}$ ounces, will require a spacing of

approximately 33 x 13 inches, 32 x 14, 36 x 10, or 34 x 12. These spacings will give 15,000 to 16,000 plants per acre on the basis of a 100% stand.

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A History of Kermis

By Elton M. Smith '31

KERMIS has been in action, on the campus of the New York State College of Agriculture, and later Home Economics, for the past sixteen years. It started as a natural outlet of activity and dramatic expression in the different clubs and departments of the College. The main object of Kermis was to entertain Farmers' Week guests in addition to giving the students in the College an opportunity to participate in dramatics.

The type of performance has changed from time to time as public and student demand has changed. But the purpose has always been mainly entertaining Farmers' Week guests.

In 1914 stimulus arose among the different energetic groups on the Agriculture Campus to put on some skit or stunt in Bailey Hall for the entertainment of Farmers' Week guests. This program was so well received by the visitors and the students enjoyed putting it on so well, they had others the next three succeeding years with more clubs taking part each year.

The program for the fourth Kermis was very extensive and was the climax of the club programs.

Program for 1917:

1. Alma Mater
Agriculture Glee Club.
2. Fun on Honeymoon Farm
An original one-act comedy depicting life at a country boarding house. Presented by students in Floriculture.
3. Selection
Agriculture Glee Club.
4. Cornell Foresters at Home
A glimpse of camp life, presented by the Forestry Club. The place was the Cornell

Forestry Camp in the Adirondacks and the time was any evening after supper.

5. Intermission

6. Prince Caloric and Princess Pieta

A dietetic morsel in four courses, presented by Frigga Fylge the Home Economics society, and by the Junior class of the College of Agriculture.

7. Evening Song

Agriculture Glee Club.

This was a very instructive as well as an educational program, but the effects of the war were felt the next year and Kermis only put on one play. It was written by Russell Lord '18, then a student in the College of Agriculture, and was entitled, "They Who Till". This was the family history of a prosperous colonial family showing how well they were situated in colonial times and how poor the second generation became in Civil War days and the third generation was presented by a young man getting up and giving a very captivating speech on the "Future of Agriculture".

FROM this time on Kermis produced a play each Farmers' Week, which was written by a student in the College of Agriculture and later Home Economics. The following are the plays produced each year.

1918

They Who Till, Russell Lord '18.

1919

The Field of Honor, Eugene B. Sullivan '18.

1920

All Thumbs, Russell Lord '18.

1921

The One Way Out, Roger B. Corbett '22.

1922

It Takes Two, Roger B. Corbett '22.

1923

The Meddlers, A. C. Carlson '23 and Phillip C. Wakely '23.

1924

To Them Who Know, George W. Sullivan, Jr. '26.

Old Things, Judson W. Genung '26.

1925

Such Is Life, Ruth A. Northrup '25.

1926

Finding A Way Out, F. B. "Doc" Wright '22.

Amends, Norma H. Wright '27.

1928

Old Iry, L. E. Bradshaw, Spec.

1929 (Professional plays)

Poor Aubrey, George Kelley; *The Blue Teapot*, J. L. Latham; *The Dear Departed*, Stanley Houghton.

1930

After Caucus, Walter H. Hoose '30.

Usually two or three plays have been produced each year, but these are the ones written by the students.

As the years have passed by it has been increasingly noticeable that the original purpose of Kermis entertaining the Farm and Home Week guests has been less and less needed. Late years they have found plenty of entertainment in the speaking contests, concert, country life plays given by different high school groups, so that Kermis has had to put its production on Friday night. Many of the people have gone home by this time and many who do stay go to the Young Farmer's Club banquet. Consequently Kermis has rightly felt that it is no longer needed as an entertaining group during Farm and Home Week but should develop into an amateur dramatic educational group.

IT HAS been felt by many interested persons that Kermis should change its organization making it more formal and lasting throughout the year. However the old organization had not seen fit to do this until this year, when it met on April 9, 1930, in Roberts Assembly and adopted a constitution. This made Kermis a formal group whose purpose is: to provide an opportunity in the Colleges of Agriculture and Home Economics for participation in



THE CAST OF THE 1930 KERMIS PLAY, AFTER CAUCUS

amateur dramatics and, to promote rural drama.

Under the new organization Kermis intends to put on several one act plays at different get-togethers on the Agriculture Campus during the year as well as putting on one major production which will probably be put on in the University

Theater in the spring. They are also running a one act rural play writing contest in the United States and Canada with \$230 in prizes. This was made possible by a gift from Mrs. Henry Morganthau, Jr., made through the *American Agriculturist*.

Over a period of the past sixteen years, Kermis has changed from an informal skit

and stunt producing organization, participated in by all Agriculture groups, to a formal amateur dramatic organization for the students in the Colleges of Agriculture and Home Economics. Thus Kermis has successfully completed one era of its history and we all wish for success in its new venture.

Collegiate Country Life Clubs Hold Conference

By Natalie Fairbanks '32

THE CORNELL University 4-H Club was one of the many groups interested in country life, which sent a delegate to the preliminary conference of the Collegiate Country Life Clubs, sponsored by the American Country Life Association held at Madison, Wisconsin from March 28-30. For three years the A. C. L. A. has held a student section in connection with their annual conference, but the topic selected for their thirteenth annual meeting was so all inclusive and challenging that the Collegiate Country Life Clubs decided to take an active part in the program. The topic of the Annual Conference will be, *Standards of Living*.

Fifty delegates, representing sixteen colleges and universities, attended the preliminary conference held in co-operation with Blue Shield Country Life Club of the University of Wisconsin, to "set up" the student section program for 1930.

The preliminary conference consisted of three sessions of a discussion nature and three sessions of an acquaintanceship and fellowship nature. The first of the discussion sessions was given to set up of the student section program of the A. C. L. A. conference for 1930. The main part of the student program will come on Friday October 10, according to the decision of the group. Activities will start on Wednesday morning, October 8, with the reception for incoming students. This is the second day of the general conference. The students will "fit in" to the main conference program during Wednesday, Thursday, and Friday morning. Following the close of the general conference at Friday noon, they will continue in session for further consideration of the application of the things gained from the general conference to the student rural life program.

The goals around which the student conference will be built are first, friendship, second, instruction, and third, inspiration. These will be considered in regard to the activities of student clubs interested in rural life. The program will be built particularly around the local club's extension activities with which they come in contact, and the result of club activities in training its members in leadership in improving rural standards of living.

Particular emphasis will be placed upon the second point. This phase of the program will include a consideration of the

importance of factual knowledge on the part of future rural leaders and the necessity of a comprehensive analysis of the situation before advocating changes in rural standards of living. It will also include a consideration of the importance of recognizing what constitutes a desirable rural leader.

The second discussion session was devoted to a consideration of a plan of affiliation of rural life clubs with the A. C. L. A. The following tentative plan was agreed upon:

The local club (at the college) shall be composed of students and faculty members who live or have lived in rural communities, or who have a genuine interest in rural life.

The name of the club shall be determined locally; it may be "Country Life Club", "Rural Life Club", "4-H Club", "Future Farmers", "Junior Grange", "Rural Pastors Association", or the like, as desired by the local organization.

The local club shall submit thru the student secretary to the executive secretary of the American Country Life Association, a proposed program and an annual report of the year's activities.

Materials from these programs and reports shall be made available to all local clubs affiliated with the American Country Life Association.

The local club shall pay to the American Country Life Association the sum of \$5.00 for which it shall receive two copies of "Rural America" and two copies of the "Proceedings of the Annual Conference of the Association." These copies when no longer of use to the club, shall be filed with the college or university library.

The local club shall appoint or elect a corresponding secretary whose duty it shall be to submit items of local interest, at least once per semester, to the student editor of "Rural America" and to his college publications.

The A. C. L. A. shall be requested to arrange for a student section in "Rural America" in charge of a student editor under the direction of the chairman of the Student Committee. For the present, to facilitate in the 1930 conference, it is suggested that this student editor be connected with the Blue Shield Country Life Club, University of Wisconsin.

The chief aims of the club shall be to dignify rural life, to promote interest in it, and to create the right kind of sentiment for it, thereby to develop in the hearts of students an appreciation of the advantages and disadvantages of country life.

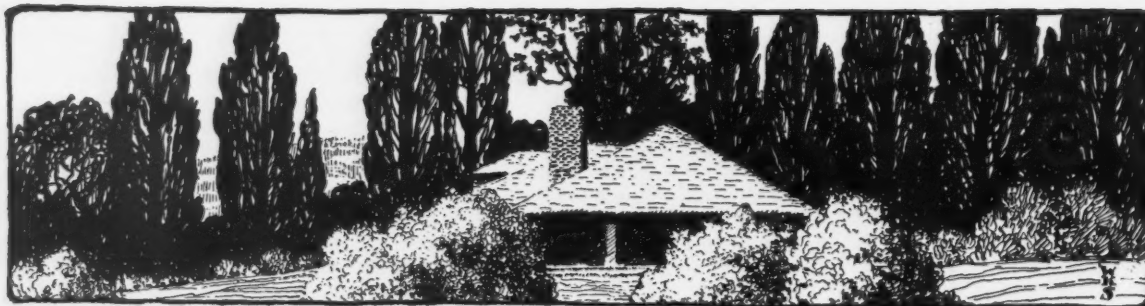
The club's activities shall be to continue in the lives of rural students on the campus an interest in the home community; to acquaint the campus with organized activities in rural communities; to determine what the rural student's place should be in his home community; to determine through discussion the most essential elements of rural leadership and to arrange for student representation at National American Country Life Association Conference.

The third discussion session was given to a summarization of the discussions of the two preceding sessions.

The acquaintanceship and fellowship meetings were in the form of dinner, luncheon and banquet. The first of these was for the purpose of introducing the person, the second the local club, and the third the college or university. The dinner and luncheon were served by the Blue Shield Country Life Club members in their meeting rooms. The banquet was held at the Wisconsin Union and was in charge of Frank Clements. The welcome to visiting delegates was extended by Miss F. L. Nardin, Dean of Women of the University of Wisconsin. The main address of the banquet, and of the conference, "Rural Life on the College Campus" was given by J. H. Kolb, Head of the Rural Life Section, University of Wisconsin.

The preliminary conference resulted in the selection of two continuation committees, one on the 1930 conference program and the other on the plan of affiliation. The latter is to report on further progress at the fall conference.

Natalie Fairbanks, the Cornell representative, is acting on the latter, and we are immensely interested in the outcome of the fall conference at which our own Dean Mann, who is one of the directors of the American Country Life Association, will be a speaker. There is a chance that the A. C. L. A. convention will be held in Ithaca in 1931, and we are certain, that should it be, it will be a stimulant to all.



Through Our Wide Windows

Masters

FOR SEVERAL years the Standard Farm Papers have been honoring agriculture and recognizing the dignity of tilling the soil by awarding the title of Master Farmer to the most successful of our farmers. The *American Agriculturist*, serving New York State, has recently announced a new policy. It is going to honor not only our outstanding farmers, but our most successful homemakers as well, with the title of Master Homemaker. The farm youth of our state are to be honored, also. Five boys and one girl, representing the Boy Scouts, the Young Farmers Clubs, and the 4-H Clubs, will be awarded Farm Youth Achievement Awards.

The requirements for these titles are interesting. A Master Farmer must not only be successful financially, but he must provide a good home for his family, give his children the best education possible, and take an active part in the affairs of his community. A Master Homemaker must not only make her house attractive and be a good cook, but she must be a real friend and chum to her children and make her home a place where the family will want to stay. She, too, must do her best toward educating her children and must take an active interest in her community.

The Farm Youth must be outstanding in his chosen project; be it Scouting, 4-H work, or the Young Farmers Clubs. Moreover, he must take a real interest in his house, the farm, and his school work. He must have also demonstrated leadership qualities, too.

This is a fine thing that the *American Agriculturist* is doing. It is recognizing that the home and our youth are as important, probably more important, to the welfare of country life than the raising of crops and animals.

Seniors in the World

IT FACES the Seniors now—this great wide world, so often referred to, yet so little understood. It will present itself most commonly to the Seniors as a classroom, as people to be taught; and this is by far the most inspirational aspect of the world. For if the graduating classes have well received their instruction they shall begin to teach, young minds and old minds, they shall begin to use the methods of appealing to the learning and living part of the human mind of whatever race or color.

It may be considered a crime to keep the knowledge we have acquired without transmitting to the less fortunate individual, without utilizing it well and to the profit of humanity. Knowledge is more precious than rubies, but knowledge buried in the head of a selfish graduate is like a cave of hidden treasure, sometimes never, never to be discovered! The graduates of ag and domecon have the advantage of a practical knowledge, more easily workable than that of languages, classic art and poetry. Yet it is very easy to forget the scientific methods studied here, or to be too lazy to put them in practice.

The new graduates will not be selfish, hiding their knowledge, or intolerant of the people from whom they have come. They

will not fulfill the younger generation formula of snobbery, recklessness, and jazz; but rather will they seek to take over the problems of those who are not so well-educated, the less informed, to teach them the scientific spirit, the new methods, and the greatest wisdom.

New Officers Announced

IN THE spring a young man's fancy turns—thus runs the quotation that so often appears at this season of the year. As spring wanes and summer approaches, we seniors find our time occupied by many distracting, and yet engaging pursuits. In order that we may devote more of our time to the business of completing our education, perchance graduating, and also that we may do what is commonly known as job hunting, for we have reached that stage of life when we must reach forth and earn our own share of our existence, and make ourselves a part of this life and country, we are surrendering our grasp on the reins of the COUNTRYMAN, that younger and more fertile minds may take our places.

It is with great pleasure that we announce the following staff in whose hands the fortunes of the COUNTRYMAN will rest for another year. William Gifford Hoag '31 of New York City will occupy the office of editor-in-chief. Wilbur Franklin Pease '31 of Cooperstown will assume the duties of managing editor; Henry S. Clapp '31 of Grand Gorge, Campus Countryman editor; Jean Olive Frederick '32 of Greenlawn, Domecon Doings editor, and Darwin Miscall '31 of Albany, Cornell Foresters editor.

The business affairs of the COUNTRYMAN will be guided by Arthur Brisbane Nichols '31 of Niagara Falls, as business manager, and Frederick Billings Allyn '31 of Mystic, Connecticut, as circulation manager.

The members of the 1929-1930 staff have relinquished their positions and will act as advisors for the new staff in this, and the next issue. We feel sure that the fate of the COUNTRYMAN is safe in their hands and wish them all manner of success in their tasks which we know from experience are far from easy.

New Members Elected to the Board

IT IS with pleasure that we announce the election of Darwin Miscall '31 of Albany and Kate Gleason Rogers '32 of Tompkins Corners as members of the editorial staff of the COUNTRYMAN. The new members were elected to the board at the close of the editorial competition which was opened last fall.

Due to the absence from college of the 4-H Club editor, we will publish articles of interest to 4-H Club members rather than have a separate page devoted to 4-H work. The article in this issue is a report on the work being done by the Collegiate Country Life Clubs. This article was written by Natalie Fairbanks '32 who represented the Cornell University 4-H Club at a recent conference.

THE CORNELL COUNTRYMAN wishes to do four things: publish interesting alumni notes, furnish campus news, present the latest agricultural information, and stimulate boys and girls to seek the aid of their State Colleges in order that they may lead fuller and finer lives.



Former Student Notes

'74

Frederick Camp Wood, associated with the Grosvenor Library in Buffalo for many years and financial secretary at the time of his retirement in 1926, died at his home there on January 27.

He was born in Buffalo, the son of Francis P. and Elizabeth Merrell Wood. His wife, Mrs. Ellen Budgen Wood, survives him.

'79

Frank H. Severance, eminent historian and secretary and treasurer of the Buffalo Historical Society, last summer received from the Superintendent of Education of France, the decoration of crossed palms on purple ribbon for his *Story of Jean Claire*, a portrayal of the French immigration to the Niagara frontier. Among Mr. Severance's other works are *Old Trails of the Niagara Frontier*, *Picture Book of Early Buffalo*, and *The Gilbert Family Captivity*. He has edited volumes IV to XXIX the Historical Society's publications, and is now working on a report of the administration of the late Henry Wayland Hill as president of the Society. He lives at 150 Jewett Parkway, Buffalo. Mrs. Severance was Lena L. Hill '79. Their children are Hayward M. Severance '09, professor at Oregon State College, Mildred Severance '15, who is teaching french at the Bennett High School, and Edith L. Severance '23, who is with the Henry Holt Publishing Company in New York.

'80

Lee J. Vance is the publisher of *The Beverage News* at 302 Broadway, New York. He was from 1904 to 1921 secretary of the American Grape and Wine Growers Association, and has contributed to many magazines and to the *Encyclopedia Americana* and the *Encyclopaedia Britannica*. He lives at Bayside, Long Island, New York.

'83

Frederick Arthur Holton died at the Garfield Hospital in Washington on November 28. He was born in Galesburg, Illinois. He received the degree of B.S. and was for a time instructor in chemistry. He left to become associated with the

United States Patent Office in Washington, and later was scientific expert with Mauro, Cameron, and Lewis, patent attorneys there.

In 1891 Mr. Holton married Jessie Hawkins Moon '87. Mrs. Holton, with the assistance of her husband, organized the Holton-Arms School in Washington. Mrs. Holton survives him.

'08

Dr. J. G. Needham, head of the Department of Entomology, has left by means of the Pan American Airways for a trip through the West Indies and the east coast of South America. The purpose of the trip is twofold; first to collect dragonflies and second to study the methods of control of waters on the flood plains along the Demarara River.

'09

Ernest Alanson Pattengill, since 1900 a member of the faculty at Iowa State College and associate professor of mathematics since 1914, died at his home in Ames on February 10, of heart disease. He received the degree of B.S. and took a year of graduate study. His wife and a daughter survive him.

'00

Rushton H. Charlton, supervisor of the Ouachita National Forest, died in Hot Springs, Arkansas, on February 13, of injuries received in an automobile. He was born in Chicago fifty-one years ago. He took one year of special forestry, and soon after entered the National Forest Service. His mother and his wife, Mrs. Yvonne Charlton, survive him.

'08

M. C. Burritt, former director of extension and now a successful fruit grower at Hilton, has been appointed as a member of the New York State Public Service Commission by Governor Roosevelt. Mr. Burritt is one of the best known agricultural leaders of New York State and has attracted national attention in farm circles for his work in the organization of the Farm Bureau and agricultural system of extension in this state.

'09

John F. Goodrich is still living at 5177 Franklin Street, Hollywood, California, and writing scenarios. He has recently written two for Dorothy Mackail, two for Lois Wilson and H. B. Warner and one for Corinne Griffith.

'11

Jay D. B. Lattin, who has been studying at the Command and Staff School of the United States Army at Fort Leavenworth, will in June go to Panama as Division Signal Officer of the Panama Division. His permanent address is 16 North Main Street, Albion, New York.

'13

Fred C. Shaw is manager of the Longwater Farm in North Easton, Massachusetts. He has three daughters, Sara Helen, aged ten, Lydia, aged seven, and Jane, who is one.

'14

Charles H. Ballou recently resigned from the Japanese Beetle Laboratory in Moorestown, New Jersey, to become professor and head of the department of entomology in the Escuela de Agricultura and the Estacion Experimental at Medellin, Colombia. His address is Apartado 300, Medellin.

Dr. Nicholas Kopelof is the author of a new book *Man and Microbes*, published by Alfred A. Knopf.

'15

Kenneth A. Tapscoff is now a landscape architect with E. Burton Cooke at 104 Peachtree Building, Atlanta, Georgia. He was previously a landscape architect with the Jemison Companies in Birmingham, Alabama, and for two years with Stone and Webster, Inc., in Tampa, Florida. He lives at 166 Ponce de Leon Avenue, Atlanta. He has a year-and-a-half-old son, Douglas Eugene.

Elton R. Wagner is now manager of the farm department of the Niagara County Bank and Trust Company in Lockport, New York. He lives at 55 Lakeview Parkway. He had previously been farming and had served from 1925 as secretary and treasurer of the Niagara County

Farm Bureau and as the county representative on the State Farm Bureau fruit committee. He has a daughter, Rachel Louise, who is seven.

'16

J. W. Sharp is now foreman of the creamery on the Forsgate Farm, Jamesburg, New Jersey.

Reed Travis, superintendent of the Wilkes Barre, Pennsylvania plant of the Woodlawn Dairy Co., and a former member of the dairy industry staff, was a recent visitor on the campus. He has one daughter and a pair of twin boys.

'17

A son, Horace Leonard, was born on February 3 to Mr. and Mrs. George S. Kephart. They live at 94 Royal Road, Bangor, Maine.

'18

A daughter, Elizabeth Ann, was born on February 24 to Edwin G. Batsford and Mrs. Batsford (Luella A. Bolton '21). They live at Apartment A-26, 2 Adrian Avenue, New York.

Anthony von Wening is a banker, associated with the Continental Illinois Company at 231 South LaSalle Street, Chicago. He lives at 562 Earleton Road, Kenilworth, Illinois. A son, Anthony Frederick, was born on December 14.

'19

Edward B. Fernschild managed an ice cream plant after graduation until he says that he realized there was more money and pleasanter work in other fields. He is now in the real estate business in Westchester properties. He is not married, but engaged. Who the lucky lady is we cannot say. His address is 54 Lawton Street, New Rochelle, New York.

Lynwood N. Harvey has been since 1926 circulation manager of the F. W. Dodge Corporation at 119 West Fortieth Street, New York, publishers of *The Architectural Record*, *The American Contractor* and *The Real Estate Record and Builders Guide*. Mrs. Harvey was Gertrude Hughes '20. They live in Harrington Park, New Jersey.

Harold F. Miller this year became merchandise manager of the Outlet, a department store in Providence, Rhode Island. He lives at 245 Elmgrove Avenue. He has three children.

Charles C. Perce is school principal in Ellisburg, New York. After graduation he spent several years at the University farm, but has been teaching for the last four years. Charlie is married and the proud father of three girls, Rosamond, aged seven; Norma, six, and Betty Jean, two years old.

'20

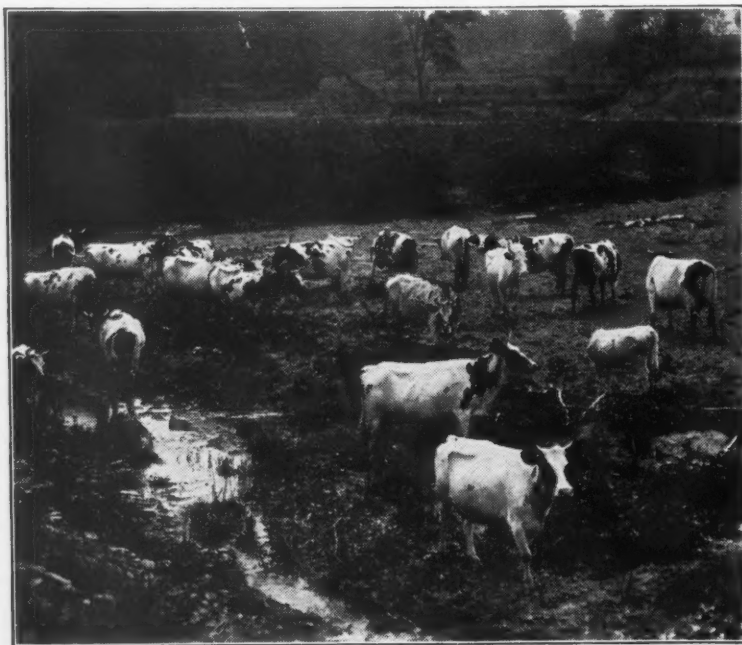
Raymond W. Bell has been doing research work in dairy byproducts since he graduated. He is now with the Bureau of Dairy Industry, United States Department of Agriculture. Mrs. Bell graduated from Cornell in '21. They have one son William Warren and are living at 4409 Greenwich Parkway, Washington, D. C.

Grace C. Dimelow is educational service director and assistant sales promotion manager of the Butterick Publishing Company at 161 Sixth Avenue, New York. She lives at 15 Park Avenue.

Frederick Kenneth Gorke is living at South View Terrace, Syracuse, New York, R. D. 1. He is associated in business with the H. J. Gorke Estate, Wholesale Electrical Supply. After graduation Fred was with the International Harvester Company for four years, from repair department clerk to sales manager of motor trucks in Cayuga County, and all the steps between. The succeeding five years he has been General Manager of the Gorke Electrical Wholesale Supply. His wife is Ruth E. Whiteside, who graduated from Syracuse University.

Lawrence D. Hiatt was engaged in orchard work for the first two years after graduation. Since then he has been a chemist in the Willys-Overland Company at Toledo, Ohio. His address is 2617 Parkwood Avenue, Toledo, Ohio.

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O. W. SMITH, *Secretary*
CORNELL UNIVERSITY

ITHACA, NEW YORK

Ira H. Houston is farming in Goshen, New York. A daughter, Lois Anne, was born on August 26.

Clarence Johnson is now a county farm bureau agent in Schenectady County, New York. For two years after he graduated, Clarence did farming and advanced registry work, then for five years he was in 4-H Club work in Ontario County, and since then he has been farm bureau agent. Mrs. Johnson did graduate work at Cornell in 1925. They are living at 82 Robinson Street, Schenectady, New York.

F. G. Ludington is in the retail flour and feed business and judges those products from 6:30 to 6:30. His wife graduated from Oswego Normal. They have two

children, John and Jane Ludington. Their address is 5 North 3rd, Fulton, New York.

Iva Miller is teaching home economics in a school in Buffalo.

Except for seven months with the Dairymen's League, Francis Oates has been with the Chenango Ice Cream Company. He is now president of this concern which manufactures Velvet Ice Cream and bottles Coca-Cola. He is married to Lillian Carmer, Arts '22. They have two daughters, Eleanore, seven years and Dorothy, one and a half years. They live at 12 Conkey Avenue, Norwich, New York.

Edward L. Plass has been operating his own poultry farm of S. C. White Leghorns ever since graduation, at Poughkeepsie, New York, R. D. 3. He married Louise H. Hamburg also of the class of '20 and they have six children, Edward Bristow, Barbara Louise, Robert William, Ruth Tully, June Elizabeth, and Anne Redmond.

Martha E. Quick, president of the Cornell Women's Club in Detroit, has been head of the exact science department at the Munger Intermediate School in Detroit since 1925. She attended Cornell for four summer sessions, receiving her M.S. in education. She lives at 13525 Turner Avenue, Detroit.

Robert M. Volkert is a Redwood specialist for the Great Southern Lumber Company, at Bogalusa, Louisiana. He is married and has three children, Roberta Josephine, and Ruth and Edward, twins.

'21

A second son, Philip Andrew, was born on February 7 to John R. Fleming '21 and Mrs. Fleming (Margaret A. Cushman '23). They live at 116 West Oakland Avenue, Columbus, Ohio. Fleming is still extension news editor in the agricultural college extension service at Ohio State.

E. B. Giddings is manager of the Coca-Cola division of the Chenango Ice Cream Company of Norwich, New York.

'22

William H. Stacy has a year's leave of absence from the agricultural extension service of Iowa State College and is now field secretary with the American Country Life Association.

Lee I. Towsley, after serving for over a year as county club agent of Norfolk County, Massachusetts, on February 15 joined the faculty of the Norfolk County Agricultural School. He lives at 228 East Street, Walpole, Massachusetts.

'23

Marvin A. Clark is with the extension service of Rutgers. His address is Court House, Freehold, New Jersey.

A daughter, Nancy Faye, was born on February 27 to William L. Davidson and Mrs. Davidson (Marguerite E. Mazzarella '24). They live at 252 Lincoln Avenue, Elizabeth, New Jersey.

Marcus H. Phillips is now secretary of the Orleans County Trust Company in Albion, New York. He lives at 64 West State Street.

C. F. Witty is district superintendent for the Consumets Dairy. He is married and lives at 21 Prospect Street, Binghamton, New York.

'24

A daughter, Dorothy Joanne, was born on July 10 to Laurence W. Corbett and Mrs. Corbett (Helen M. Ives '23).

Irene L. Hower is County Supervisor of home economics of Montgomery County, Pennsylvania. Her address is Court House Annex, Norristown, Pennsylvania.

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J. C. Hurlburt is farming at Interlaken, New York. He has two daughters.

Irving W. Ingalls has been appointed advertising manager of the *American Agriculturist*.

George Kreisel was married in August. He owns and runs a 160 acre farm. His address is Weedsport, New York, R. D. 3. His wife's maiden name was Ellen Hayes. George's old motto "sane, safe, and single" no longer holds true.

Florence W. Opie is Montgomery County secretary of the Y. W. C. A. at Dayton, Ohio, where she has been for the past three years. Prior to that she spent one year at home following a year as home demonstration agent in Tompkins County, New York. Her address is 135 Lexington Avenue, Dayton, Ohio.

Roy E. Pardee, a former winter course student, is raising ducks on Long Island. He is the originator of Pardee's Perfect Pekin Ducks. His address is Islip, Long Island, New York.

Mrs. Hortense Black Pratt will be the new assistant home demonstration agent in Steuben County.

Irving H. Rodwell is still at his job of "life underwriter" with the New York Life Insurance Company at Rochester, New York. "Chuck" spent the first seven months after graduation traveling through the west, then he instructed for a term here at Cornell after which he served as perishable freight inspector for the Pennsylvania Railroad. He is married and has one ten-month's old boy, David H. His address is 940 Winton Road North, Rochester, New York.

James L. Sears is farming in Baldwinsville, New York. A daughter was born on November 30.

Charles W. Skeele is running his farm at Clockville, New York. He married Iva Springstead '25.

'25

Eugene Borda, who is with the United Fruit Company at Puerto Barrios, Guatemala, has been moved from his job as overseer of a banana farm and is now doing soil survey work.

A daughter, Elizabeth Ann, was born on November 2 to Dr. and Mrs. Emerson J. Dillon. They live in Phoenix, New York. Mrs. Dillon was Eleanor Baker '25, daughter of William P. Baker '91.

Alfred L. Olsen has resigned as chief accountant of the Williamsport Hotels Corporation, and has returned to Cornell to study for his master's degree in hotel accounting and to instruct in specialized hotel accounting and food cost control. He lives at 17 South Avenue.

Charles D. Patterson is now dairy and milk inspector for the city of Port Jervis, New York.

Harry E. Reynolds is auditor for Horwath and Horwath of New York at the General Brock Hotel in Niagara Falls, Canada. Mrs. Reynolds was Anne E. Barrett '25. They live at 519 Fourth Street, Niagara Falls, New York.

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Byron Spence was married on August 24 in the Middlebury College Chapel in Middlebury, Vermont, to Miss Beatrice A. Mills, who received her B.S. from Middlebury and her A.M. in '27 from Columbia. George A. West '24 was best man at the wedding and among the ushers were Jared Van Wagenen '26 and George N. Page, Jr., '26. Mr. and Mrs. Spence are living at 403 Six Avenue, Wauwatosa, Wisconsin. He is Western sales manager for Chr. Hansen's Laboratory, Inc.

'26

Mr. and Mrs. A. C. Bowman of Portland, Ore., have announced the engagement of their daughter, Elvida Bowman, a graduate of Oregon State College, to John Marshall, Jr. He is associated with the Federal Farm Board in Washington.

H. Hale Clark and Mrs. Clark (Marjorie G. Morrison) are living in Binghamton, New York. They have a daughter.

Dorothy E. Ellinwood is teaching in Almond, New York.

L. P. Ham left the employ of the *American Agriculturist* recently to go with the Griswold Eshleman Company, an advertising agency, as junior account executive "Pete" was Business Manager of the COUNTRYMAN back in '26. He writes, "I sure enjoy the COUNTRYMAN but it seems funny that you don't have more notes on the class of '26. They must be a bunch of hermits or something. Or maybe they are so busy working they don't have time to write the news about themselves". Come on, '26. Let's show him you're not asleep. "Pete" can be reached by mail at the Griswold Eshleman Company, Terminal Tower Building, Cleveland, Ohio.

Ruth Hendryx is married to Wesley Knighton, M.E. '25. They live at 21 Fairlawn Avenue, Albany, New York. Mr. Knighton is with the Telephone Company.

Harold L. Hoyt is the farm bureau manager of Fulton County, New York. He is living at 72 First Avenue, Gloversville, New York.

Margaret I. Kline and James Oros were married on February 15, 1930. Mr. Oros is cashier of the National Biscuit Company, New Haven, Connecticut.

Albert Kurdt is county agricultural agent of Ulster County, New York. His address is 74 John Street, Kingston.

Mary Louise Lewis is with the White Sewing Machine Company in Buffalo.

Hilda R. Longyear is private secretary to Charles Kellogg, the nature singer. Her permanent address is Morgan Hill, California.

A son John Paul, Jr., was born on June 23 to John P. Pritchard '22 and Mrs. Pritchard (Ruth B. Smith '26). Pritchard is head of the Department of Classical Languages and professor of Greek at Washington and Jefferson College in Washington, Pennsylvania. They live at 381 East Beau Street.

L. Christine Spraker is a teacher of costume design and clothing in the Memorial High School in Haddonfield, New Jersey. Her address is 120 Kings Highway, West.

Margaret A. Stansfield writes that Laura E. Eaton '26 is teaching home economics in Summit Hill, Pennsylvania.

A daughter, Louise Virginia, was born on November 3 to Mr. and Mrs. Lewis H. Steele. Their address is Box 14, Wilton, New York. Steele is a poultryman on the Sanatorium Farm of the Metropolitan Life Insurance Company.

Mrs. W. R. Thomspson (Geraldine Tremaine) is an assistant dietitian at the Buffalo City Hospital. She is living at 46 Avery Street, Buffalo, New York.

Edgar W. Van Voris now lives in Richmondville, New York.

David J. Williams, Jr., is farming in Richmond, Kentucky. His address is Box 154. A son, David John Williams, 3d, was born on December 13.

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EXPLOSIVES

John J. Willie and Mrs. Willie (Beatrice Benedicks) now live at 30 Magaw Place, New York. Willie is assistant statistician in perishable food-stuffs in the Bureau of Commerce, Port of New York Authority. Mrs. Willie is instructing in classics at Hunter College and is working for her M.A. at Columbia.

'27

John A. Brill is with the G.L.F. service store in Greene, New York. He is living at 11 North Chenango Street, Greene.

Mr. and Mrs. Frederick D. Colson of Albany, New York, have announced the marriage of their daughter, Jane E. Colson to Franklin H. Romaine, a graduate of Williams. They are living at 111 West Sixteenth Street, New York.

James T. Estes is with the Radio-Victor Company in Camden, New Jersey. He lives at 843 Ormond Avenue, Drexel Hill, Pennsylvania.

Mr. and Mrs. S. E. Huston have announced the marriage of their daughter, F. Helen Huston to Howard H. Shedrick. They are living at 78 Victoria Boulevard, Kenmore, New York.

A daughter, Anne Elizabeth, was born on August 5, 1929, to William H. Lodge and Mrs. Lodge (Lilla H. Richman).

Lynn A. Mitchell, W. C. is employed at the Eastman Kodak Company, Rochester, New York. He says he is playing with a test tube and beaker in the Chemistry Department. He lives at home in Hilton, New York.

William W. Walker is living at Walker Heights, Elizabeth, Pennsylvania. He is in the traffic department of the Pittsburgh division of the Vacuum Oil Company.

Robert B. Stocking has been elected secretary of the Lake Placid Club Lodge. His address is Lake Placid Club, Lake Placid, Hylands County, Florida.

Harold Wentworth is now on the editorial staff of Webster's Dictionary, for the G. and C. Merriam Company at Broadway and Worthington Street, Springfield, Massachusetts. He lives at the University Club.

Eleanor E. Wright was married on August 17 to Morris T. Decker. They are living at 66 Park Avenue, Babylon, Long Island, New York. She writes that her position as assistant manager of the tea room in the Panhellenic Hotel for Women at Forty-ninth Street and First Avenue, New York, is now held by Evangeline E. Kelsey '29.

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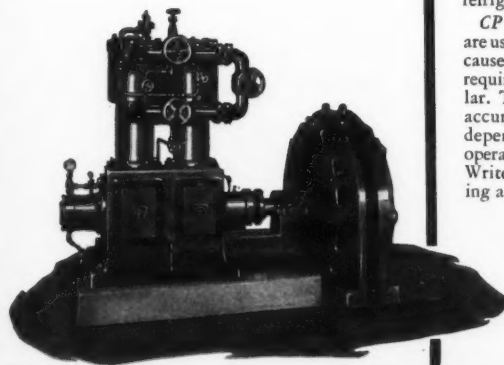
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'28

Fuller D. Baird is in charge of the biological and nutritional research laboratories of the National Oil Products Company in Harrison, New Jersey. He lives at the Y. M. C. A., Park Street, Montclair.

Mr. and Mrs. Barney A. Barlow have announced the engagement of their daughter, Frances E. Barlow to Dr. Samuel A. Vogel, who is a graduate of Wisconsin and received his M.D. in 1923 at Illinois. Miss Barlow is a dietitian at the Buffalo

City Hospital. She lives at 899 Lafayette Avenue.

William J. Chapman, who has been instructing in the Department of Rural Engineering at Cornell, has enlisted as a flying cadet in the United States Army and is now in training at Brooks Field, San Antonio, Texas.

Mildred L. Gordon has finished a special course in dietetics at the Mayo Clinic in Rochester, Minnesota and is now dietitian at the Hotel Maryland in

Pasadena, California. She is in charge of special diets served to patients referred by a clinic in Pasadena, a new project made possible by the cooperation of the hotel.

Mrs. Daisy Harder of Fort Smith, Arkansas has announced the marriage of her daughter, Lorene Harder, to Frederick C. Simmons, Jr., on November 29. They are living in Jacksonville, Florida. Simmons is with the J. D. Lacey Lumber Company.

William Field Russell, attached to the coast artillery unit at Honolulu was killed there on December 9 when he fell over a steep cliff. He was born in Brooklyn on September 6, 1906, the son of Mr. and Mrs. William F. Russell.

Andrew G. Sharp received the degree of M.S. in forestry last June from the University of Idaho, where he was elected to Sigma Xi. He is now with the Weyerhaeuser Timber Company in Longview, Washington. He lives at 1309 Twenty-first Street.

C. Elizabeth Thomas is teaching home-making in the High School at Avon, New York.

Henry C. Tomlinson of Croydon Surrey, England and Miss Elizabeth Harriet Drew of the Barclay and of Scarboro were recently married in New York City. They are honeymooning in England and will return to the United States in May. Mr. Tomlinson is with Harper and Brothers, publishers.

Luella G. Urban is in the manufacturer's service division of the automotive department of the Vacuum Oil Company at 61 Broadway, New York. She lives at 33 Fox Boulevard, Merrick, Long Island, New York.

Mr. and Mrs. J. H. Weller of New Haven, Connecticut have announced the engagement of their daughter, Catherine A. Weller to Dean J. Bennett '29.

'29

Clarence O. Bennett is rural service representative with the Niagara, Lockport and Ontario Power Company in Batavia, New York. His address is 24 Washington Avenue.

Margene Harris is working for her Master's in nutrition at The State University of Iowa.

William H. Hayes is teaching at the Saint John Vocational School in Saint John, New Brunswick. He lives at 260 Douglas Avenue. He is the author of *Fruit Growing in New Brunswick*, and *The Geography of New Brunswick*.

Francis W. Ruzicka has become affiliated recently with The William Byrd Press of Richmond, Virginia. He is the director of the Horticultural Printing Department.

Margaret S. Scheer is taking a special course in nutrition at the Mayo Clinic in Rochester, Minnesota. She lives at 311 Fourth Avenue, S.W.



TOMORROW!

HEADS LIFTED from the job of today...the thoughts of Father and Son borne away on the wings of that man-made bird of the air...thoughts turned for the moment to build the things of tomorrow.

Yesterday...where Indians hunted...today farmers reap. Where covered wagons lurched...farmers' wives speed in automobiles. Where the hoe lay...a huge machine shed stands. Where livestock was fed just because it should be fed...livestock feeding has become a thinking job.

Into this rush of progress many years ago came the Purina Mills, the pioneer makers of feed. What a change since then! Pork to market in six months...dairy cows milking gallons instead of quarts...pullets laying heavily in fall and winter. Better feed has told its story!

Tomorrow...the Fathers and Sons of the farm will demand and realize many more things. Purina will be ready...with her big experiment farm...her huge feed testing laboratories...her power to gather the best raw ingredients possible for Checkerboard Feed. She will be ready always with a Checkerboard Feed which will satisfy the farmer's one demand which has remained unchanged through all the years...a feed which will make him the most money...yesterday...today...tomorrow!



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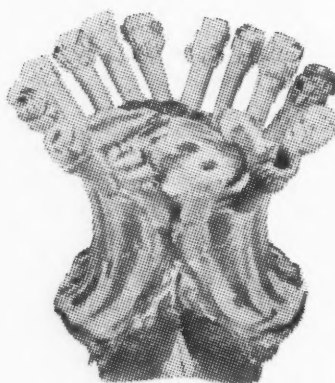
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PROFESSOR E. B. HART TALKS ON ANIMAL NUTRITION

Noted Nutrition Specialist Lectures to
Large Group in Roberts Assembly

PROFESSOR E. B. Hart of the University of Wisconsin gave a lecture on "Some Applications of Modern Theories and Developments of Nutrition to Farm Animals," on Friday evening, April 18, at 8:15 in Roberts Assembly. People interested in nutrition were given a fine opportunity to hear one of the outstanding specialists in the field of animal nutrition. As a result over one hundred of the faculty, graduate students, and undergraduate students attended.

Professor Hart pointed out that formerly rations were based largely on the energy requirements of the animals. Within the last few years, however, much more attention has been given to the exploration of other phases of nutrition work, many of which are as yet hardly touched. One of the nutritional fields in which practical work is being done more extensively is that of proteins. It has been found that the casein of milk is excellent for growth. Meat proteins alone cannot replace milk protein, but a combination of the two is very good. Milk and corn proteins are perhaps one of the most efficient combinations for growth.

Vitamins Increasingly Studied

The study of vitamins has received a great impetus within the last few years. Yellow corn is unexcelled as a cereal for carrying vitamin A. A deficiency of this causes a checking of growth, roup, and an interference with the metabolism of certain ducts in chickens. It has been found that wheat and alfalfa may be substituted for yellow corn. Vitamin A deficiency in swine often causes muscular incoordination, and in cattle disturbs reproductive activities. In 1922 the first cure for the disease of rickets in poultry was made. Not only is vitamin D essential to prevent rickets, but also for egg production and their fertility.

Perhaps one of the most important problems in dairy cattle nutrition is the controlling of calcification. Dr. Forbes of Penn State first started experiments along this line. It was found that sunlight and green grass did not seem to aid in the intake of calcium to secure the proper balance. Ultra-violet rays alone had no effect on calcium utilization, but when marl was added to the ration, sunlight and green grass seemed to give the proper positive balance.

The effects of the deficiency of phosphorus in the ration are emaciation, decreased production, and abnormal reproductive activities of the animal. Fortunately, phosphorous deficiency seems to be confined to certain localized areas.

Interesting Work Done at Wisconsin

One of the most interesting questions of nutrition is the relation between the ration and disease resistance. In an experiment at Wisconsin, two groups of cattle were divided equally, one being given a poor ration deficient in minerals, and the other being given a good ration. These cattle were all disease free before starting the experiment. They were taken at the age of six months and there were no appreciable differences in the rates of growth.

They were bred at 16 months and there was little difference in their first calves and no breeding troubles in either group. They were then bred the second time and after becoming pregnant were deliberately exposed to the bang abortus bacillus. In the poor ration group seven cows aborted and eleven aborted in the good ration group. Professor Hart hastened to say that this was merely an illustration of our great need of actual facts. Here was a case where our generally accepted theory of good nutrition producing greater disease resistance did not work. This may, however, be merely a coincidence and contain no great value, except what is perhaps the greatest value of all, namely, the mistake of accepting theories without being based on fact. Professor Hart believes that one of our greatest needs is more carefully controlled experiments and in greater numbers in all lines of nutritional work.

AG ATHLETES ACTIVE

The ag athletes are working hard these days in an endeavor to garner enough points in the spring sports to again bring the inter-college championship to the Ag College. Teams are entered in the tennis, wrestling, base-ball, and crew events. Leon Lasher '31 is in general charge of athletics. W. O. Sellers '30 has charge of the wrestling team; Ray Flumerfelt '31 is managing the base-ball team; and Fred Allyn '31 has charge of the crew men.

Crew prospects look particularly bright. There are several men left from last year's combination, and some new men that give promise of developing into good material. Rex Ransley '31, last year's coxy, has the following men working out with him: "Fred" Allyn '31, "Ted" Burnett '30, Carl Dellgren '31, "Don" Foster '32, "Hank" Forschmiedt '31, "Fred" Norton '31, "Dick" Pringle '32, "Jim" Rose '32, "Art" Slocum '30, H. E. Travis '30, and "Devy" Devenpeck '30.

COBLESKILL LIVESTOCK CLASS VISITS AN HUS DEPARTMENT

On Thursday, April 17, the livestock class of the Cobleskill High School, under the direction of E. B. Hewes, visited the animal husbandry department of the State College of Agriculture. Professor F. B. Morrison gave a lecture on feeding of dairy cattle. Later in the day the class inspected the various barns. Mr. E. S. Harrison conducted them through the dairy barn; J. B. Wilman showed them the swine and sheep barns; and Professor M. W. Harper took them through the horse barn. The dairy cattle and sheep experiments were also visited. These are being conducted at Professor G. F. Warren's '05 farm. The following professors gave lectures covering certain material in their respective fields: E. S. Savage '10 on dairy cattle; M. W. Harper on steers; L. A. Maynard '15 on nutrition, and Mr. C. D. Schutt on meats.

ROUND-UP CLUB ELECT OFFICERS

The Round-Up Club met in Roberts Assembly at the close of Professor Hart's lecture Friday evening, April 18. The following officers were elected for the coming year's work: F. W. "Fred" Schutz '31, president; R. "Dick" Pringle '32, vice-president; R. D. "Ralph" Merrill '31, secretary; and F. D. "Fred" Norton '31, treasurer.

HOTEL "EZRA CORNELL" TO ENTERTAIN GUESTS MAY 9

Elaborate Social Festivities Will Accompany Opening of Fifth Annual Hotel

ELABORATE plans are being made for the fifth opening of Hotel "Ezra Cornell" on Friday, May 9. This unique hotel-for-a-day is operated by the students in the hotel administration course. The four previous openings have been so successful that plans are under way to make the fifth opening the most elaborate social function in the history of Cornell.

There has been arranged a busy schedule for the guests of Hotel "Ezra Cornell". Friday afternoon there will be golf at the Country Club and also a tea for the out of town guests at the home of Professor H. B. Meek, 319 Wait Ave. The main feature of the day will be a full course formal dinner in Memorial Hall of the hotel. The steward for the dinner is John Sullivan, Jr., '30, the chef J. Franklin Perry '30, and the head waiter is "Hal" Moon '30. The speaker at the dinner will be Mr. F. A. McKowne president of the Hotel Statler Company.

An elaborate scheme of flower decorations for the banquet hall, ballroom, and lobbies of the Hotel "Ezra Cornell" is being planned by the Cornell University Floriculture Department under the directions of Professor E. A. White '16.

The entire seating capacity of the University Theatre has been sold out to the "Ezra Cornell" where the Cornell Dramatic Club will present for the entertainment of the Hotel's guests, "The Love of One's Neighbor", a comedy by Leonid Andreyev.

Dance to Be Given

The climax of the evening's entertainment will be a dance in the beautiful "Ezra Cornell" ballroom. This will follow the theatre party and will last until three o'clock in the morning. Tal Henry and His Carolians have been engaged to furnish the music.

On Saturday the guests have been invited to attend the various classes that the students attend daily. Also in the morning there has been arranged trips to Taughanock and Enfield State Parks. In the afternoon there will be several varsity events to entertain the guests. There will be a track meet with Penn, a base ball game with Princeton, and a Lacrosse game with Hobart.

This unique hotel-for-a-day is held annually in Willard Straight and is the only one of its kind in the world. It is held in the interest of hotel administration and draws many prominent men in this field to the annual affair.

The executive staff officers for the Hotel "Ezra Cornell" are: Manager, A. B. Merick '30; Assistant manager, M. C. Bartley '30; Assistant manager, H. B. Williams '30; Steward J. J. Sullivan '30; Director of Publicity, R. E. Love '30; Maitre d'Hotel, J. W. Cole '30; Chef, J. F. Perry '30; Head waiter, H. V. Moon '30; Comptroller, E. E. Burdge '30; Personnel manager, W. T. Reed '30; Sales promotion, R. A. Rose '30; and J. A. Morrison '30; Front office manager, L. H. Levy '30; Auditor, S. J. Wineburgh '30; Superintendent of service, W. Blankenship '30; Engineer, D. H. Uffinger '30; House officer, Hez Ward '30; and Housekeeper, Miss Carrie Meyer '30.

VEGETABLE GARDENING CLUB HOLDS FIRST ANNUAL DINNER

Varna Church Filled to Capacity at
Student-Faculty Get-to-Gether

SEVENTY-TWO members of the staff and student bodies of the vegetable gardening department and the Geneva Experiment Station were gastronomically satisfied and mentally enlightened by a program unexcelled in the history of the club.

W. O. Sellers '30, accompanied by southern jokes, acted as toastmaster. Professor H. C. Thompson, the first speaker of the evening, did not let a prepared vegetable talk stand in his way and gave us the "low-down" on some members of the faculty to show what a human crowd they all are. Then "Bob" Adams gave us some "Rude Rural Rhymes" before he hurried away to spread the good word about vegetables to other parts of the state. The main speaker, Henry Marquart, vegetable grower, master farmer, president of the Erie County Farm Bureau, and president of the Vegetable Growers' Association of America, gave us the following "Farmer's Philosophy of Life" as he sees it:

This country has passed through, in the last ten years, the greatest era of prosperity of any nation. Business has borrowed ahead, making the prosperity seem greater than it is. Finance corporations have made buying so easy that most people have bought more now than they can pay for in several years on their present income. Industry has manufactured ahead in anticipation of demand, until it is now in the position that agriculture was ten years ago. Farmers were then producing ahead at a war-time pace, anticipating ever rising prices, utilizing more and more poor land until the oversupply was felt by every one, and the crash upset the rural economic system of the entire country. The increasing use of the tractor and truck at this time made the situation even more acute by freeing millions of acres that had been used to grow feed for horses. Much land has again returned to disuse or to forest, and agriculture, with its surplus used up, has about struck its pace again, while industry has yet to make this adjustment.

Improved transportation has brought the market nearer the farm, and the question of where to grow any crop now is a question of soil topography and climatic adaptation, rather than one of distance from the market.

Mr. Marquart is farming 32½ acres in the intensive vegetable growing section near Buffalo. He grows 15 or 16 different crops, making successive plantings from early spring till late fall; thus, each acre of land produces two or three crops every year. City people who have the idea that farmers do nothing in winter but sit by the fire, eat apples, and drink cider would do well to watch this master farmer in his slack season getting ready for spring work.

Mr. Marquart has no sympathy for the farm relief work. To him, farm relief means a culling of the poorest, a survival of the fittest, the development of a better race of people in rural communities which are essentially the non-transient and conservative people of any nation. To this end he would advise young people who do not like the particular type of farming they anticipate doing, in fact who do not love it, to keep out. But if they do go in, they should cooperate with their neighbors and with the college for the benefit of all. In other words, push, don't drag your feet.

This talk was followed by songs by Herbert J. Gordon, accompanied by Miss Donnan.

Dean A. R. Mann, '04 as a very fitting climax to the evening, described the growth of the Ag College, in general, and especially of the vegetable gardening department from the days when Dr. L. H. Bailey first came here, to the appropriations made by the last session of the legislature for new men and materials.

FOREIGN STUDENTS VISIT

AG COLLEGE AND ENVIRONS

A group of thirty-six foreign students from Teachers College, Columbia University, spent three days, April 14 to 17, at the Ag College visiting its various departments and buildings and touring the surrounding country. Representatives from 18 countries made up the party which was in charge of Dr. Ruth McMurry. The purpose of the tour was principally to study the methods of teaching agriculture in practice here, especially in regard to the extension system. A varied program of lectures and entertainment was arranged for under the direction of C. A. Taylor '14, Director of Short Courses. Side trips were made to Dryden, Cortland, Freeville, Penn Yan, and Watkins Glen. On Wednesday noon, April 16, The Ithaca Rotary Club entertained one representative from each country at its weekly luncheon. The party was joined that evening by a second group of 37 students who had spent the first of the week in Rochester visiting some of the industries located there.

KERMIS REORGANIZED TO FORM AN AMATEUR DRAMATIC CLUB

ON APRIL 9, Wednesday evening at 8 o'clock, the Kermis Committee met in Roberts Assembly and adopted the constitution that radically changed the organization of Kermis. This constitution had previously been drawn up by Professor G. E. Peabody '18, Miss M. E. Duthie, Alfred Van Wagenen '30, E. M. Smith '31, Elizabeth Hopper '31, and Margaret Gilchrist '32. Kermis is now an amateur dramatic club for students in the Colleges of Agriculture and Home Economics. Membership in the club is based solely upon the performance of the person in at least two productions, and upon the work of the competitors for the managerships of the production staff. The students of these two Colleges will be given an opportunity to gain experience in producing amateur productions.

Purpose of Kermis Explained

Kermis plans to produce at least one major play each year and several minor productions. These will be given at the various Ag-Domecon Assemblies and similar meetings. It is hoped that these may also be presented in surrounding high schools and grange halls. In this way the students may demonstrate what may be done in rural amateur dramatics. Because of the state-wide rural dramatic contest now held during Farm and Home Week, Kermis will not present a major production at that time.

In order that plays of merit may be obtained, the former play writing contest has been opened to include anyone in the United States or Canada who cares to compete. That one of the primary purposes of Kermis may be maintained, namely, that of encouraging the production of plays with rural settings, it is essential that the plays entered in the contest be of rural background. The prize has been increased from \$100 to \$230 for the best plays offered. This has been made possible by a donation of Mrs. Henry Morgenthau, Jr., given through the *American Agriculturalist*.

The following officers were elected, to take office next fall: Elton M. Smith '31, president; Dorothy Hopper '31, vice-president; J. E. Rose '32, treasurer; and Elizabeth Hopper '31, secretary. F. B. Allyn '31 was elected publicity manager. J. E. Rose '32 was elected assistant production manager and R. S. Jonas '32 assistant stage manager.

WORLD POULTRY CONGRESS

TO BE HELD IN LONDON

The fourth World Poultry Congress, held every three years, will convene in London, England, July 22-30. Professors J. E. Rice '90, G. F. Heuser '15, G. O. Hall, and L. E. Weaver '18 will attend this Congress. Professor Rice will present a paper entitled "Administrative Relationships in Poultry Husbandry in the United States." Professors Heuser and L. C. Norris '18 will submit a paper on the "Influences of the Protein Metal on the Rate of Growth in Chickens"; and Dr. Hall and Dean Marble will present a joint paper discussing "The Results of Twenty Years' of Breeding High and Low Line Single Comb White Leghorns at the Cornell University Agricultural Experiment Station."

A feature of the Congress is the exhibitions that are held. Perhaps one of the most striking and interesting ones is the exhibit of the different breeds of poultry native to the various countries. These are not competitive, but merely educational.



THE CORNELL COUNTRYMAN BOARD FOR 1929-30

Front Row: C. H. Diebold '30, Alfred Van Wagenen '30, S. C. Bates '30, R. F. Mapes '30, D. M. Roy '30, D. A. Armstrong '30, H. E. Gulvin '30
Second Row: R. A. Ransley '31, A. B. Nichols '31, E. R. Lewis '30, B. E. Foster '30, J. O. Frederick '32, Montague Howard '32
Back Row: F. D. Norton '31, W. G. Hoag '31, H. S. Clapp '31, G. A. Earl, Jr. '31

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KERMIS TO PRESENT PLAY AT AG-DOMECON ASSEMBLY

THE Ag-Domecon Association will hold its last social event of the year on Friday evening, May 16 at 7:30 o'clock. The first part of the evening will be spent in Roberts Assembly where the recently reorganized Kermis will stage a one act play, in accordance with its new policy, and other entertainment will consist of a few stunts.

The latter part of the evening will be spent dancing in Domecon Assembly until 12:00 o'clock. The committee has promised a good orchestra and a good time for all, and plenty of refreshments—of course!

F. B. "Fred" Allyn '31 is general chairman in charge of the "whole works". He has appointed the following chairmen of committees. E. M. "Ed" Palmquist '31 is in charge of entertainment, D. R. "Dot" Hopper '31 is to provide plenty of nourishment, J. O. "Jean" Frederick '32 is to "talk it up" (otherwise known as getting publicity), and W. G. "Giff" Hoag '31 is in charge of arrangements.

E. M. SMITH '31 ELECTED PRESIDENT OF AG-DOMECON

Just as we go to press we hear that E. M. "Smitty" Smith '31 has been elected president of the Ag-Domecon Association for next year. The other officers elected at this time were vice-president, Dorothy "Dot" King '31; secretary, R. C. "Dick" Crosby '31; treasurer, A. B. "Art" Nichols '31; and assistant director of ag athletics, J. E. "Jim" Rose '32. At the same election the following members of the Honor Council were elected: E. M. "Ed" Palmquist '31, V. M. "Vesta" Rogers '31, and D. F. "Don" Armstrong '33.

PLANT PATHOLOGY ACTIVE IN FIELD RESEARCH WORK

Each year the department of plant pathology carries on much investigational work in the field. Field laboratories are established in various localities where diseases of particular crops are being grown. A graduate student is placed in charge of each of these investigations and remains at the field laboratory during the growing season. The work is supervised by research specialists of the department.

This year eight of these investigations are supported by funds of industrial fellowships; two established by farm bureau associations, two by growers associations, one by a chemical company, one by a seed company, one by a rose society, and one by four interested agencies. Three field investigations are supported by state appropriations and one by joint state and federal funds.

FLORICULTURISTS MAKE TRIPS

Two classes in floriculture made trips to Washington and New York, respectively, during spring vacation. Six students in the green-keeping class under Professor R. W. Curtis visited the golf courses of the Philadelphia Club and the Merion Cricket Club. The following day was spent in Washington at the National Turf Gardens at the Arlington Farms. That afternoon the party visited Mount Vernon and the Lee mansion.

The class in woody plant propagation under Professor C. J. Hunn visited nurseries near New York City. Monday, April 7, was spent at the Cottage Gardens and the Van Kleeft Nurseries. The party went to New Jersey the next day where they visited the F and F Nurseries at Springfield, the Bobink and Atkins, and the Julius Roehrs and Company at Rutherford.

HO-NUN-DE-KAH

F. B. Allyn
T. B. Andersen
Lowell Besley
O. deR. Carvalho
R. C. Crosby
C. A. Dellgren
G. J. Dinsmore
L. M. Handleman
W. G. Hoag
C. P. Katsampes
L. L. Lasher
F. A. Leuder
E. A. Lutz
Edwin Madden
O. H. Maughn
A. B. Nichols
E. M. Palmquist
E. M. Smith
H. F. Schultz

PROFS PRANKS

Professors A. J. Eames, L. W. Sharp, Donald Reddick, Mr. Ernest Abbe, and Miss Boothroyd of the botany department are planning to attend the International Botanical Congress to be held during the month of August in England at Cambridge University. Professor Eames has two papers to present before the Congress. He will study at Cambridge from June until September.

Professor H. B. Meek, director of the hotel management course is spending his sabbatic leave at Yale University where he is doing special graduate work. He will return for the "Ezra Cornell" opening.

Professors Paul Work '10 of the vegetable gardening department, A. J. Heinicke '16 of the pomology department, M. P. Rasmussen of marketing, and A. W. Gibson '17, associate secretary of vocational guidance and placement, spent April 15-19 in New York City studying the market conditions of fruits and vegetables. They were especially interested in determining the needs and opportunities that these two closely related industries offered for well trained college men in the various fields of their work.

NEW CORRESPONDENCE COURSE OFFERED IN DAIRY MARKETING

The ag college has inaugurated a new correspondence course in the marketing of dairy products. This course is to be given as a result of the many problems that are continually being encountered by the milk producers of this State.

Although special attention will be given to the marketing of fluid milk, the course will also include work in the selling of other dairy products such as butter and cheese and their relation to the fluid milk production. The course will also consider such topics as the geography of milk production in New York and in the nation as a whole, problems of seasonal production and surplus, costs of hauling milk, and plans for selling milk.

The following scholarships have been awarded to the students in the hotel management course; the International Stewards Association, E. K. Pope '32 and J. B. Smith '31; The Edward M. Tierney Memorial, L. G. Durham '31 and M. W. Jackson '31; The Horwath and Horwath, E. E. Burdge '30 and A. B. Merrick '30; and the Savarins Scholarships, M. C. Smith '32 and W. C. DeCamp '21.

DOMECON STUDENTS AID IN CONDUCTING ELECTRICAL SHOW

STUDENTS in the Home Economics College who are taking the home service course in charge of Professor M. J. Robinson, co-operated with the members of the Eta Kappa Nu, honorary electrical engineering society, in holding the recent electrical show. They were in charge of exhibits and demonstrations to show the many and diversified uses of electricity today.

In the Home Economics section of the show, which was located in Franklin Hall, the domeconers demonstrated many of the uses of electricity in the modern home. One group was in charge of exhibits illustrating proper lighting in the home for both beauty and eye comfort. The proper way to light a bridge table, with bridge lamps at opposite corners, was a useful suggestion to many. Proper lighting for a reading chair, davenport, and secretary was also shown. A table centerpiece made of Christmas tree lights and crepe paper was most novel and also very effective, not to mention its inexpensiveness. Two tables were tastefully set, and upon them were electrical appliances suitable for making breakfast at the table.

Effects of Light on Color Shown

An especially interesting feature of the Home Economics exhibit was the set-up showing the effects of light on color. There were striking examples of how different lighting may vary the looks of one's dress. It is all too often that we do not consider the light in which we are to wear our new frock. Is it surprising that we are so frequently disappointed with the color matching that we have done in the daylight for a gown to be worn in the evening? Not when we see that a difference lighting effects can make.

The section of the exhibit which demonstrated the new kitchen and laundry equipment was a great drawing card. Stoves, washers, refrigerators, and even corn-poppers were shown. Not a few observers were interested in the small mangle, and several of them seemed to enjoy themselves trying to iron collars and handkerchiefs.

The engineers also had many exhibits, all of which are too numerous to mention. We cannot, however, fail to mention the electric toy train, operated by telephone, the electric eye, and the exhibit of modern and historic telephone equipment.

AG ECONOMISTS TO HOLD CONFERENCE HERE THIS SUMMER

The International Conference of Agricultural Economists will be held here this summer, August 18-29. Besides representatives from United States, Great Britain, Ireland, Denmark, Germany, Scotland, Finland, and Switzerland will be represented. Director C. E. Ladd '12 will be general chairman of the committees, assisted by Professor G. F. Warren '05. The other committees are: Professor Leland Spencer '18, secretary; Professor W. I. Myers '14; Director Ladd, fellowships and housing; Professor F. A. Pearson '12, programs; Professor M. P. Rasmussen '19, banking; Professor F. P. Weaver, entertainment; Professor J. F. Harriot '20 and Extension Specialist C. A. Taylor '14 will have charge of the sports and tours.

The Forestry Department issues another warning to the juniors. Each member of the class of 1931 must complete and report on his forestry practice before September, 1930, or he will not be allowed to register at that time. This ruling is to be strictly enforced and no exceptions will be allowed.

" . . and they lived happily ever after . . ."

With this familiar theme ends the romantic tale of the old-fashioned movie screen film. Today . . . the theme thought is apparently the same, but it is the voice or tones of expression which carries this thought over. Incidentally, it may be applied with our business. You furnish the thought or material, while we furnish the voice or means of expression through typography . . . and we do it in the most dignified manner . . . just as the subject indicates.

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Domecon



Doings

WELL-KNOWN LECTURER GIVES TALKS ON FAMILY INCOME

Domecon students have had an opportunity during the past month to hear a series of four lectures by Dr. C. G. Woodhouse, well known for her research as well as her writings and lectures in economics of the household, who has been at Cornell as special lecturer in the senior course in household management which is taking up family income and expenditure. Dr. Woodhouse was formerly with the Bureau of Home Economics at Washington. At present she is Director of the Institute of Women's Professional Relations at North Carolina College for Women.

Her very interesting lectures have taken up the economic and social aspects of family income, standards of living, and sources and control of family income. At the last meeting of the class she compared standards of living today with those of a hundred years ago, by means of two household expense accounts of families in similar circumstances, one made in 1816-17 which amounted to \$1,986.65, the other made in 1926-27 which amounted to \$4,853.

Modern Family Better Off

Records show that the professional family of today is much better supplied with comforts, conveniences, and luxuries than its counterpart a century ago. To get this, part of its income is spent on items which were not easily obtained or were actually unknown in 1816. Such present-day entries as canned goods, prepared breakfast foods, and oranges do not appear in the earlier records, nor do telephone, automobile, commercial laundry, daily ice, children's equipment, or life insurance. Today's family also has more and better clothing and housing, medical and dental care; it uses electric light, gas, and coal instead of candles and firewood; it spends money for reading matter, vocational activities and recreations and other things not even thought of by the earlier family.

Although both families spent almost identical amounts for food, the modern food bill with its increased allotment for fruits, vegetables and milk shows the great advance in scientific knowledge of diet and the improvement in transportation and marketing facilities during the last century.

IT'S SMART TO BE THRIFTY

How many are the girls who say that they will never marry unless "he's fairly well off", unless he's able to save them the work which naturally falls to a housewife. Whether these girls actually stick to their point when Prince Charming comes along is another matter, but still it represents an attitude not entirely commendable or unselfish in present day young women. It can scarcely be advocated that modern girls go back to the clinging vine stage, and be ready to accept any drudgery for their dear husband's sake, yet they must not forget that many of their parents who

now have radios, automobiles and trips to Europe started in some small apartment in the Bronx with a painted Campbell soup box as the baby's crib. This is a true story! It is unfair for a girl to make a man feel that he should be well on the way to \$6000 a year before she can marry him.

Even the smartest shops in New York realize the value of an "inexpensive department" or a \$16.75 or a \$19.50 shop within their main stores. With the decreased price of silks, the increasing use of machines for stamping, cutting and sewing it is ridiculous now to pay a great deal for a dress which in a few weeks will be found in the cheaper stores.

Many stores have specially reasonable prices in certain kinds of goods—pocket-books in one shop, gloves in another, underthings in a third, or costume jewelry in a fourth. The wise shopper knows how to choose her shop, and doesn't delude herself into thinking that a shop having excellent inexpensive hats is equally good in every line. Many of the larger department stores have a mail-order business which sell things at low cost; if, when shopping in the city, one stops in at the mail order department floor, one may very often find the best inexpensive things in town.

There are many ways of beating the game! The so-called poor and underfed of New York's East Side dine more royally than many on Park Avenue; without rent to pay or the expenses of fancy packages the push cart peddlers sell imported nuts, endive, pure olive oil, broccoli, expensive cheeses, and fresh fish for a ridiculous part of the accepted price. Yet as one may always notice in an East Side woman's buying technique, she is a very shrewd clever woman who never gets fooled, who buys wisely and only after close investigation, and is probably far less likely to fall for a smooth sales line than for a very juicy looking Bartlett pear. Women, if they are going to live on a small income, must be very clever shoppers, very wise cautious buyers, relying less on advertising and sales lines than upon knowledge and good sense.

FAT METABOLISM STUDIED

Professor Edith MacArthur, assistant professor of nutrition research of the College of Home Economics, has been making a study of fat metabolism. About forty-five University women acted as subjects. In describing her work Professor MacArthur said, "The women were under observation from 8 o'clock in the morning until 3 o'clock in the afternoon. The rate of digestion of fats was traced through the study of the blood tests of the subjects. It was found that the highest point in the digestion of fats is three hours after feeding."

Professor MacArthur is a graduate of the College of Home Economics and received her Ph.D. degree in Chemistry at Columbia University.

LEGISLATIVE APPROPRIATIONS ANNOUNCED BY DEAN MANN

The Colleges of Agriculture and Home Economics together were granted appropriations of \$645,000 for planning, building, and improvements, at the recent session of the State Legislature. The main appropriation made at the session was that of \$510,000 to complete the construction of the new Home Economics building. Previously there had been set aside for this purpose the sum of \$475,000, and the total will be nearly \$1,000,000.

A sum of \$20,000 was appropriated for financing the work of the soil survey now being conducted by the College of Agriculture. The new plant industry building also profited in this legislation, for \$15,000 was set aside for the building of walks, grading, and beautifying the grounds around it.

Toward the close of the session a \$100,000 appropriation for the preparation of plans and foundations of the new agricultural economics building was successfully carried through. The legislature will make further provisions for this building next year. The plans are to use this new building for the agricultural economics courses that are now being conducted by Professor G. F. Warren '05 in the farm management building.

FOOD STUDENTS SPEND WEEK VISITING IN NEW YORK

Twenty-four home economics juniors and seniors who are taking a course in institutional management spent part of their spring vacation visiting and studying cafeterias, restaurants, hospitals, and markets in New York City to see at first hand how large-quantity food preparation is carried on in successful large institutions of various kinds.

Their itinerary included two hotels, two hospitals, two large tea-rooms, an infants' home, a diabetic clinic for children, a large equipment house, Columbia University Commons and residential halls, a bakery and delicatessen, and an automaton restaurant. They made a complete tour of the Ile de France, one of the French Line steamers, and made a special visit to the kitchen. They also attended a fruit auction where they saw the marketing of immense quantities of fresh fruit.

CLOTHING TEACHERS LECTURE

Professor Buelah Blackmore, of the Home Economics clothing department went to Michigan on April 25 to lecture to 150 hotel employees of the Michigan State Hotel Association on "The Selection of Textiles for Use in Hotels."

Professor Muriel Brasie will meet with groups of clothing teachers to discuss instruction methods on May 3 in Buffalo and on May 10 in New York City.

Professor Ruth Scott, on April 22, lectured to mothers of the Bryant Park Playschool Organization on "Children's Clothing".

"WHAT'S WRONG?"

Emily Post wrote her book about good manners for all time and all styles: yet there are a few special difficulties which arise for the emancipated and boyish modern girl when she walks again in flowing robes and Empire and Greek styles. A fashionable women's magazine has listed some of the crimes against chic which one must not commit:

Wearing a train on the dance floor and getting it stepped on! (The new correct length for evening is an even, to-the-heel hem).

Eating with long gloves on!

Wearing a boyish bob instead of a softer and wavier feminine coiffure.

Wearing an off-the-forehead hat on the forehead.

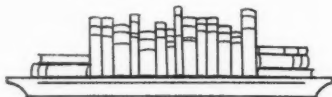
Showing the growing ends of hair from beneath the back of the hat, thus destroying its smart, simple chic.

And wearing a long dress of uneven or jagged hem-line on the street beneath a straight line coat.

"It's details that make a performance," said a stage director.

MISS PFUND ATTENDS NATIONAL MEETING

Professor M. C. Pfund of the department of foods and nutrition spent the week, April 7 to 12, in Atlanta, Georgia, attending the Annual Spring Meeting of The American Chemical Society. She reports a most profitable and enjoyable trip.

**BOOK REVIEW****French Science Applied to the Home**

Mlle. Bernege's *Housekeeping Method* (*De La Methode Menagere*) is so scientific and practical a discussion of the problems which beset every woman, and offers such magical solutions to them, the while inspiring in the reader also the spirit of scientific investigation and experiment, that it can be regarded the finest and most thorough book of its kind ever published. She brings within reach of the housewife the great scientific methods of experiment and analysis, applying her highly scientific and logical mind to dispelling the drudgery of the woman in the home.

While Mrs. Lillian Gilbreth, the American student and advocate of industrial methods of labor in the home, is chiefly interested in the administration and organization of labor in the home, Mlle. Bernege studies and applies in detail the method of doing, organizing the work itself, from the worker's rather than the executive's point of view. This book is particularly valuable, since so many women do their own work and have not the advantage as has Mrs. Gilbreth, of having eleven children to help her!

In the conclusion of her chapter on the "Science and Organization of Work," Mlle. Bernege sets forth the four rules which form the basis of her book and show the scientific methods which can work such magic in the running of a home. She applies them here, by way of illustration, to the simple task of cleaning:

1. *Define the function.* What is meant by cleaning? What particular kind of cleaning is needed in the particular instance? What are the objects to be cleaned?

**PARIS MODERNIZES CLASSIC LINES**

The new long and trailing gowns make us appear like the "fair-girdled women of Troy". They demand carriage, poise, grace and a womanly charm that we really should never have neglected. They even permit a slightly fuller figure than the flapper styles allowed, and many heavier women look magnificently tall and statuesque. But we must restrain our boyish strides and our loud voices if we are not to appear ridiculous in gowns that would have made Dido envious. *Vogue* sums up the "striking and logical results of the changes in fashion":

Fulness of material and freedom of line. Softly draped neck lines, and draped and crossed neck lines on day and evening dresses, and also in jackets, blouses and coats.

Capes and cape motifs on all types of clothes.

The softly tailored suit, for sports, town and afternoon.

Blouses, and bodices with the blouse effect.

Jackets that indicate the waistline by fit and by belts.

Skirts that hang free from the moulded and draped hip yokes.

Moderate length for day and full even length for evening.

One piece dresses with bolero jackets or capes.

Coats that are wrapped, shaped, bloused, belted, and caped.

Light and dark colors combined for suits, dresses, and coats.

Solid colored fabrics and multicolor weaves that give a monotone effect.

And an evening mode that because of its freedom and sophisticated simplicity permits a wide range of treatments and silhouettes.

"2. *Create the mechanism*, that is, establish the actual system well organized to fulfill the function: brooms, dusters, soaps, brushes, . . .

"3. *Determine the law specific to the function*, that is, determine the method with which the work is to be done: for cleaning windows, one will need such a cleanser or cloth, which one will apply in such a way, going thru such motions, for a period of, . . .

"4. *Determine the law of coordination for that function*, that is integrate this task with the group of other household tasks: in space (determination of place), in time (determination of day and hour) in personnel (determination of the person or persons responsible for this particular task)."

The succeeding chapters discuss in detail these four principles, and the means of

achieving them. To define the function she sets forth the Cartesian precepts of analysis and enumeration. This is a work very often neglected by the housewife—she hastily begins her work, forgetting what equipment she has to deal with, what supplies she will need, and what she is actually going to do. So many housewives do their work by habit that they have lost sight of the true end, and waste much time in by-paths along the way.

Illustrations Used

To create the organ, Mlle. Bernege has many excellent suggestions. Her book contains many photographs of the best equipment, the best methods of arranging it. She illustrates with photographs of her own apartment in Paris, showing its carefully worked out "sewing center", "laundry center", "accounting center" which she has organized by bringing all the equipment necessary to one function to a single place devoted wholly to that function. When she sits down to make out her accounts, her pen, ink, eraser, blotter and book are right under her hand, and she doesn't lose time and energy jumping up to hunt for them.

Perhaps the most important of all the four principles is the determination of the rules specific to the function, that is the methods with which the work is to be done and the time necessary. Mlle. Bernege here uses Mrs. Gilbreth's motion studies, and adds her own law of the advancement of work in a straight line, without waste motions, retracing of steps or needless detours. Time schedules are well considered, and determined by chronometrage (the practice of timing each piece of work with a stop watch, too little used in this country); and many models are given, made for different family conditions. Mlle. Bernege's position as a professional woman has shown her the necessity of planning her housework in order to give time for one's profession; and this is thoroughly in accord with our American conception of the professional woman and her home.

"Just as the perfectly functioning heart is of no use if it is not placed in a body" so a job, although perfectly defined and organized, is useless if not coordinated to the whole. This fourth principle of coordination is accomplished by means of organization charts and, again time schedules.

Household Administration Considered

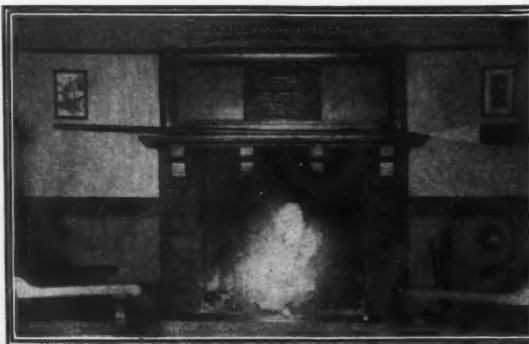
It is not to be supposed that Mlle. Bernege does not consider the administrative function of the homemaker. For this she applies the administrative principles of Henri Fayol, the great French engineer and founder of the science of administration, whose watchwords are: plan; organize; command; coordinate and control. She includes a long chapter on the technique of household accounting, which very properly comes under the question of administration.

In short, Mlle. Bernege's book is so full of valuable information and technique that it should receive instant approval among all women in this country as soon as it is published here. (It is now in preparation for publication). It is especially fortunate that Mlle. Bernege arrives in this country just as we go to press, and Miss Van Rennsaler has made arrangements for her to speak to the College of Home Economics sometime in May. Her topic is not yet chosen for giving here, but she may speak on French cookery (at which she herself is a consummate artist) or Modernistic French Art, or on the subject of her book. We will be more than glad to welcome her here.

Cornell



For the Disciples



Foresters



Of Saint Murphius

SENIORS OBSERVE FORESTRY CONDITIONS IN CAROLINA

THE CHARLESTON Y. M. C. A. was the general gathering place of the Cornell contingent Friday, March 28. "Jim" Cruikshank and party made the trip to the metropolis of the Palmetto State via the Southern Appalachians and Georgia, and consequently they were last to arrive. Jim's mud coated Ford bore excellent evidence as to both the color and building material of the roads traversed.

Saturday morning we drove out to the mill of the North State Lumber Company where we were cordially welcomed by its President, Mr. G. J. Cherry. While enroute to Witherbee 48 miles away it was discovered that the Ag Campus and vicinity has no monopoly on bad roads. The "giant" town of Witherbee hove into sight at last amid the pines. The clanging of a piece of railroad iron a few minutes later acted as a magnet in the general direction of the cook house. After the ravenous crew had disposed of the chow, an orientation trip was made. It was soon apparent that the multitude of hardwoods and pines were a Chinese puzzle to the Northern trained dendrologists.

First Movies Shown

The first moving pictures ever to be shown in Witherbee were run off by the camp's "star" visitor "Archie" Budd '29 Saturday evening after supper.

The program of the next few days was diversified. It included visiting a one band hardwood mill, permanent sample plots, making reproduction studies, cut over land observations, and cruising a ten acre plot. Many interesting observations were made on the areas that were visited. It was found that about 25 trees were left per acre after logging. The slash that is left decays very rapidly. Excellent reproduction is obtained if fire and hogs are kept out. Hogs are very destructive to long leaf reproduction; it was discovered that on one area hogs had rooted 45% of the young longleaf pine. Conditions are favorable to rapid growth i.e. one pine was found which had grown 16 inches in 35 years. One of the greatest needs of the region is better drainage for there are thousands of acres of swamps.

Visit Hellhole Swamp

The area bearing this cognomen was visited Friday and power logging was observed. A six foot alligator was seen while riding on a flat car attached to a locomotive. The train stopped and two brave, hardy foresters attempted to shoot the reptile. Time will tell whether or not success was attained for the shooting was done with moving picture cameras.

We rolled out early the next morning, packed up and motored to Tuxbury where we saw more power logging and a giant turpentine operation. We visited a

still just before noon. Berkely County is famous for stills but this one was turpentine not corn liquor. We sat down a few minutes later and did full justice to a bounteous repast furnished by the Tuxbury Lumber Company. Everywhere we could not help but notice the boundless hospitality of our hosts.

COUNTY OFFICIALS ATTEND TREE PLANTERS' SCHOOL

County supervisors from the twenty New York Counties that are reforestation in 1930 under the provisions of the Hewitt Acts attended the first tree planters' school March 27 and 28 at Fernow Hall.

The two-day program was opened by an address of welcome by Dean A. R. Mann. The remainder of the morning session was devoted to talks on the basis of forest planting. In the afternoon a field trip was made to the forest nursery and to forest plantations from five to fifty years old in the vicinity of Ithaca. A pleasant social evening was had at Willard Straight with singing and a series of interesting movies shown by Professor J. A. Cope after the dinner.

Friday morning was devoted to lectures on forest planting in practice. An actual demonstration of tree planting was given in the afternoon on the Six Mile Creek watershed with Professor S. N. Spring in charge. An inspection of the state planting on Connecticut Hill was also made.

FORESTRY SPORTS

The Forestry crew is practicing daily on the inlet. A large number of candidates report each day, but "Bill" Besley says he will give any new men a chance. If enough men come out, "Bill" assures us that the intercollegiate race will be a push-over for the Murphys.

Incidentally, baseball is underway and any aspirants to the Forestry nine can sign up with "Hal" Mitchell. If forestry wins the all around championship, these two sports will be the deciding factor. At present, we are two points behind C.E. in the contest but victories in crew and baseball will give us first place.

ROMELL TO VISIT RUSSIA

Lars G. Romell, professor of forest soils, has obtained a leave of absence for four months beginning June 1. He will attend the Second International Congress of Soil Science which will be held this summer chiefly at Moscow. There will be a 29 day excursion across all the soil zones of European Russia. The members of the Congress during this trip will have the opportunity of visiting high schools, agricultural experiment stations, large agricultural and industrial enterprises, and many other interesting things. Dr. H. P. Cooper, assistant professor of agronomy, will also make the trip.

FORESTERS ORGANIZE LOCAL FRATERNITY

REPRESENTATIVES of the four undergraduate classes in the Department of Forestry have banded themselves into a local forestry fraternity and have adopted the name of *Robin Hood*. It is expected in due course of time that this local society may be taken over as the Cornell chapter of Tau Phi Delta, a social-professional national fraternity of collegiate foresters which now has thriving chapters at several of the leading forest schools. Thus as undergraduates and as alumni Cornell Foresters will have contacts with their fellow foresters throughout the country. It is thought that this organization will be of particular advantage to the underclassmen in the department, who through it will have close association with the juniors and seniors and hence will have the opportunity to learn about their personal forestry experience and viewpoints.

The policy of this society is set forth in the prologue to its constitution: "We do hereby ordain this organization with the purpose of furthering the profession of forestry and allied subjects; to promote higher scholarship in the department of forestry; and to bring to the undergraduate a more complete understanding of what has been accomplished and what remains to be accomplished in the profession of forestry."

ARNOT FOREST NEWS

A block of 30 acres has been recently acquired by the university at the entrance to the property.

The main road up Banfield Hollow has been further developed. A sluice has been put in at the lower end of the field. Washouts in the road have been filled with stone. It will be possible this summer to drive cars into the tract to a point about three-quarters of a mile from the entrance.

The principal student activity on the forest this spring will be on experimental planting which will include the use of white pine, red pine, white spruce, Norway spruce, white ash, and red oak acorns.

FRITZ PRINCIPAL SPEAKER AT SYRACUSE BANQUET

Emanuel Fritz, professor of forestry utilization, was the principal speaker at the annual banquet of the Syracuse Forestry Club, Wednesday evening, March 26. Professor Fritz gave an interesting informal talk on the redwood situation in California, a subject which he understands thoroughly due to his wide experience in that field.

Through the courtesy of the Syracuse Forestry Club Harold Mitchell '30, Lowell Besley '31, and Darwin Miscall '31 were guests at the banquet.

Cadillac

La Salle

Auto Repair ServiceNo Job too
LargeWe are fully equipped
to service your car
completelyNo Job too
SmallWe specialize
in

Body

Fender

Radiator

Motor

Transmiss-
ion

Differential

and

Brake Work

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Potato Improvement

(Continued from page 218)

WITH the highly concentrated fertilizers on the market there is no excuse for using any fertilizer which does not contain at least 20 units of plant food. The farmer who buys such low analysis grades as a 1-9-4 or 2-8-5 is not getting the most for his money. In general, without manure he should use a 1-2-1 ratio, meaning 1 part of ammonia to 2 parts of phosphoric acid to 1 part of potash. With manure, this ratio can be broadened to 1-3-1 or 1-4-1. Examples of these analyses of the 1-2-1, are the 5-10-5, the 10-20-10, and the 15-30-15, of the 1-3-1, the 4-12-4, and 8-24-8; of the 1-4-1, the 4-16-4, and 5-20-5. A 200 bushels per acre potato crop removes from the soil approximately 52 pounds of ammonia, 17 pounds of phosphoric acid, and 57 pounds of potash. A ton of average farm manure contains approximately 12 pounds of ammonia, 5 pounds of phosphoric acid, and 10 pounds of potash. Thus it may be seen that an application of 8 tons of stable manure plus 300 pounds of a 4-16-4, will provide for all the crop requirements plus an excess to allow for leaching and surface washing.

While we are on the subject of fertilizers, the importance of sweet clover in adding both organic matter and ammonia should be emphasized. A good crop of this legume will add approximately 130 pounds per acre of ammonia obtained by the plants from the air. Your farm bureau stands ready to help you become established on sweet clover production.

POTATOES should be planted three inches deep. This means that instead of the customary ridge which the planter leaves, we may have a trough. A good way to test the depth of planting is to take a long straight-edged board and draw it along so that it leaves the soil behind it level. The seed pieces should be three inches below the bottom edge of this board. This insures the seed piece being down to the level of moisture in the case of a dry period.

Where the quack is not a serious problem the practice of ridging is unwise, because it tends to increase the moisture evaporation from the soil, thus shortening the crop in case of a drought. Weeds other than quack, can be largely controlled by the riding weeder.

The crop should be protected against blight, flea beetles, leafhoppers, and aphids by at least six applications of either spray or dust. In the case of spraying the type with three nozzles to the row (one above and one shooting from either side) is recommended. The two side nozzles are set one ahead of the other so that they impart a twisting action to the plant. The pressure should be at least 200 pounds per square inch.

When dusting is allowed, a minimum quantity of 35 pounds per acre per application of a 20-80 dust is recommended. Dusting should be done when the dew is on the plants in order that the moisture film on the plants will react with the ingredients of the dust, forming a bordeaux identical with that applied as a liquid spray. This means that the dusting, to give results, should be done largely at night or in the early morning. Wherever 60 acres are available in a single community, a spray ring can be organized by means of which the grower can get the benefit of a good sprayer even though his own acreage is small. The total cost of these is \$13 per acre, which buys a sprayer, buys the materials, and hires the operator.

As to grading, there is no question but that we should adhere closely to the U. S. No. 1 standard in putting our potatoes up for market. Whenever a trucker goes to Buffalo or Rochester with a load of poorly graded potatoes it hurts the reputation of locally grown potatoes in our own markets. We all recognize the truth but we must have the courage of our convictions and see to it that no inferior potatoes leave our farms disguised as U. S. No. 1's. In the end we are the ones who suffer.

Vegetable Business

(Continued from page 217)

Vegetable growers are fast awakening to the possibilities of better business. Through the New York State Vegetable Growers' Association, through other state and local bodies, and through the Vegetable Growers' Association of America, they are conferring and planning for the solution of their problems. They are uniting to enlist the help of state and federal research and service agencies, and to build organizations for their own service. Not long ago nine representative growers spent a day in conference with Dean A. R. Mann, '04, and others at the College of Agriculture, proposing the lines of work that seem most needed.

THE NEW day in the vegetable business has opened countless new opportunities for well-trained men. Production itself demands high ability and the training that will enable a man to appraise situations and trends, to make intelligent adjustments, and to utilize fully the information and service, both institutional and commercial, that are available. For such a man the opportunities in production were never better.

Those engaged in the commercial phases of the business have learned the usefulness of college men at the same time that college enrollment is low. The seed trade, canneries, fertilizer and equipment companies, railroads, and produce dealers are seeking men as never before.

The growing appreciation of research, teaching, and extension service by growers is creating new demands for workers in these fields. Farm Bureaus are seeking vegetable specialists, as are vocational schools, in addition to the constant calls from the colleges and experiment stations.

Our department of vegetable crops has for several years been able to meet less than a fourth of the definite requests to recommend men. This situation has been found to prevail in other institutions in no lesser degree. Those who select men for jobs are increasingly exacting as to ability, experience and training, but the opportunities seem highly favorable for first-class candidates.

CAMPUS CHATS

AG ATHLETICS

Ag athletics are getting to be with us about as much as the proverbial April showers so often cussed and discussed. But perhaps, if we keep hammering away at it long enough, we may be able to talk the foresters out of the championship. It all depends now upon our performance in the last few sports scheduled for this spring. Do you have a "yen" to "wham" a little ball back and forth across a net? Come on out—the tennis squad can use you. Or perhaps you prefer to take a long lusty swing and hear the gratifying smack of bat and ball; there's still a chance to improve the baseball team. Do you long to "beat-up" some fellow in another college? You can do it legally by trying out for the wrestling team. And don't be afraid of crew—it's awfully good exercise, really.

OUR CHANGING CAMPUS

The past year and a half have seen some remarkable changes gradually evolving and taking shape on our campus. Others are still being planned. The plant industry building is nearing completion. Home Economics and Agricultural Economic Buildings are planned. And yet, we really have a fine Tower Road now. But not less important are the changes going on among the organizations of the student body. The Ag-Domecon Association was radically reorganized. Then Heb-Sa and Helios made a startling innovation and finally combined into the Ho-Nen-De-Ka society. And the latest change, which by the way had been brewing for some time, is the complete reorganization of Kermis to form a purely amateur dramatic club.

Some people fear changes. They tend to look upon them as admissions of past errors—things that should not be mentioned above a whisper. But we say, "Well done!" It is a great attribute to be able to see the inevitable trends of the times and so conform yourself to them as to take the greatest advantage of them for your own and others' welfare. Changes—not errors, but wisdom applied to new needs and tasks.

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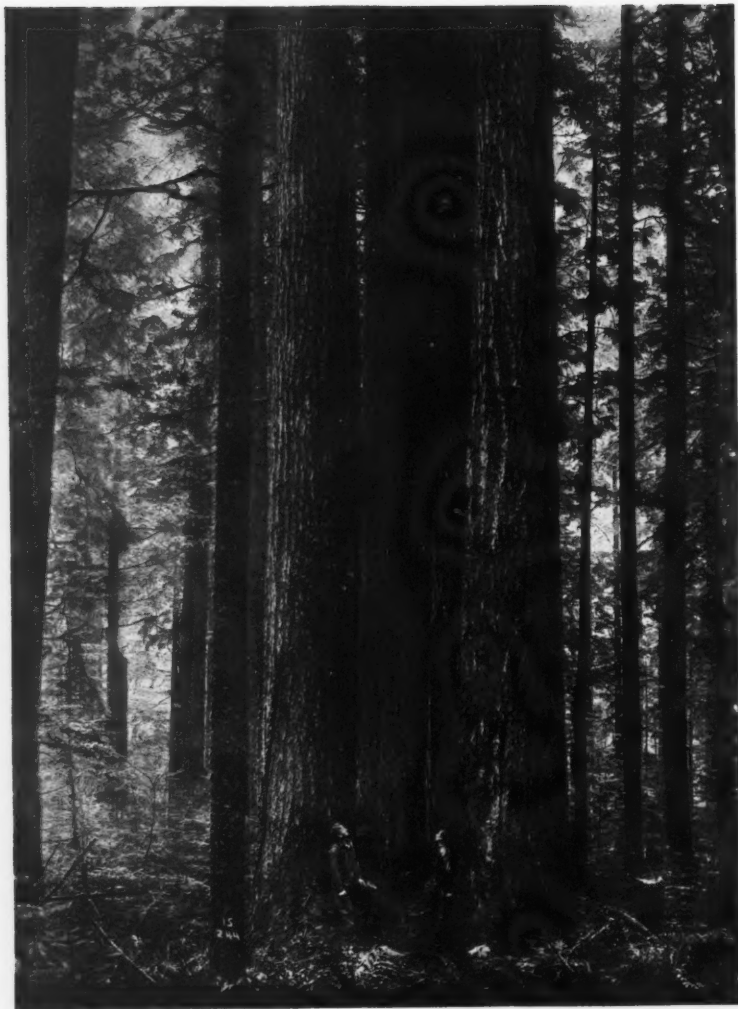


Photo by John D. Cress

A WESTERN FOREST

**A Typical Old Growth Forest of Douglas Fir and Western Hemlock
in Western Washington**